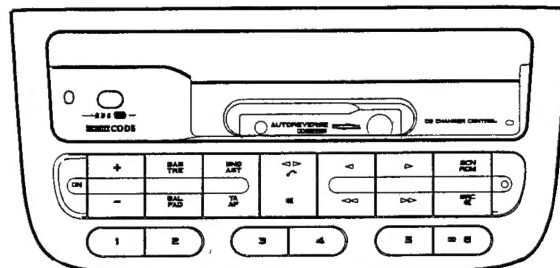


Service
Service
Service



For repair information of the cassette deck see Service Manual N° 4822 725 25482 of Car cassette deck SCA4.3/H

Service Manual

ERSATZTEILE

für Philips Car Systems

erhalten Sie bei:



KiVi Service GmbH

Windmühlenstr. 41 · 31178 Giesen/Emmerke
Tel.: 0 51 21 / 6 00 20 · Fax 0 51 21 / 6 00 25 4

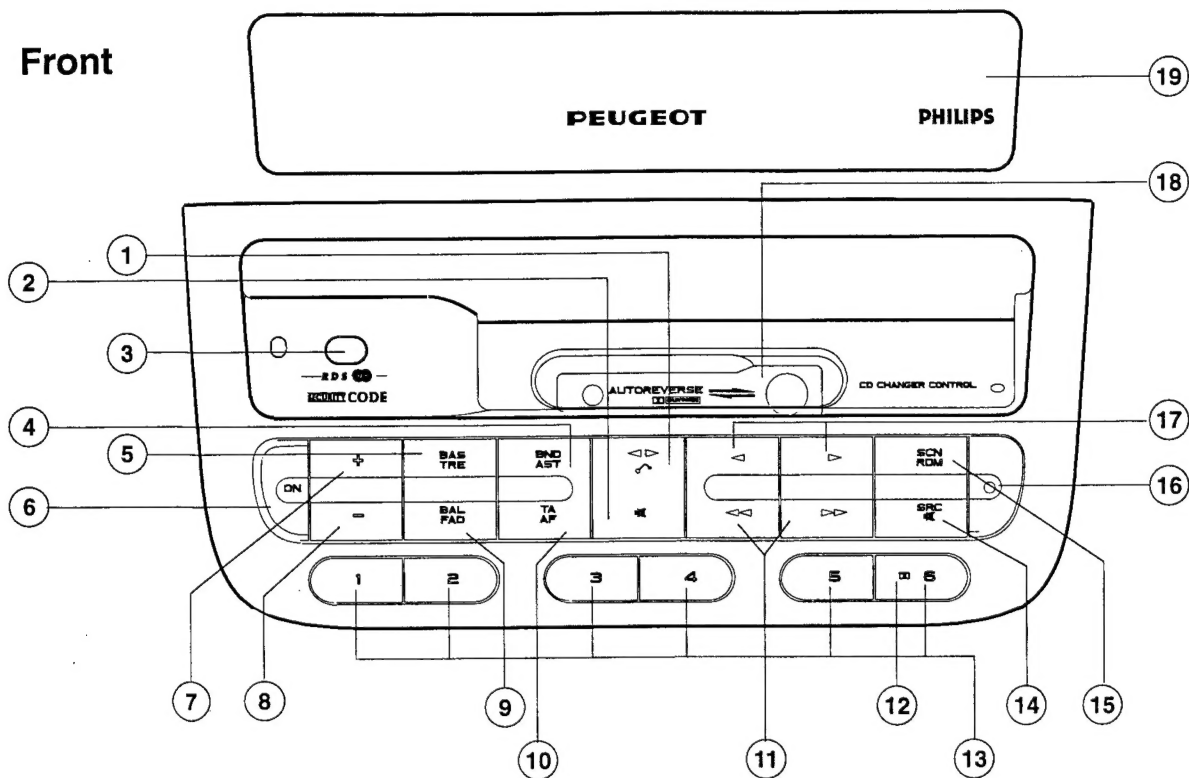
12 V

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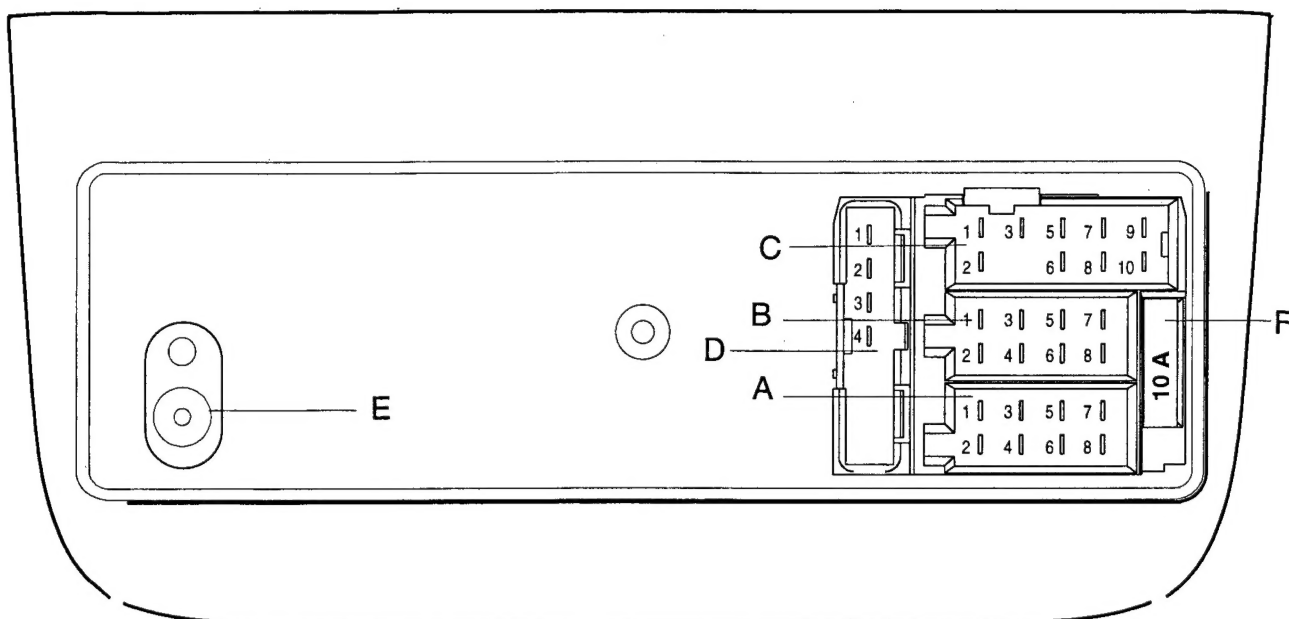
PHILIPS

Front



1	REVERSE / EJECT
2	OPEN / CLOSE FRONT SHUTTER
3	SWITCH CLOSE FRONT SHUTTER
4	BAND SELECTION / AST
5	BASS / TREBLE
6	ON / OFF
7	AUDIO +
8	AUDIO -
9	BALANCE / FADER
10	TA / AF
11	AUTOMATIC SEARCH / FAST TAPE
12	DOLBY SYSTEM
13	PRESET SELECTION
14	MODE / MUTE
15	SCAN / RANDOM
16	BLINKING LED
17	MANUAL SEARCH / TAPE MSS / CD TRACK
18	CASSETTE FLAP
19	FRONT SHUTTER

CONNECTIONS



A1	TELEPHONE MUTE	A : POWER SUPPLY
A2	VAN DATA \	
A3	VAN DATA	
A4	+ PERMANENT POWER SUPPLY	
A5	+ SWITCHED (A5 + C7 = 300 mA MAX)	
A6	+ ILLUMINATION	
A7	+ IGNITION KEY	
A8	POWER SUPPLY GROUND	
B : LOUDSPEAKERS SUPPLY (../65X)		B : LINE OUT (../65Z)
B1	REAR RIGHT +	GROUND
B2	REAR RIGHT -	GROUND
B3	FRONT RIGHT +	GROUND
B4	FRONT RIGHT -	GROUND
B5	FRONT LEFT +	OUTPUT REAR RIGHT
B6	FRONT LEFT -	OUTPUT FRONT LEFT
B7	REAR LEFT +	OUTPUT REAR LEFT
B8	REAR LEFT -	OUTPUT FRONT RIGHT
C1	BUS GROUND	C : CD CHANGER CONNECTIONS
C2	D2B +	
C3	D2B -	
C4	(NO PIN)	
C5	+ PERMANENT POWER SUPPLY = A4	
C6	POWER GROUND	
C7	+ SWITCHED (A5 + C7 = 300 mA MAX)	
C8	LINE IN RIGHT	
C9	LINE IN LEFT	
C10	LINE IN GROUND	
C11	SHIELDING	
D1	NOT USED	D : REMOTE CONTROL (LINKED TO A5)
D2	a1 = REMOTE CONTROL 1 IN	
D3	REMOTE CONTROL	
D4	a2 = REMOTE CONTROL 2 IN	
D5	NO PIN	
D6	NO PIN	
D7	NO PIN	
D8	SHIELDING	
E	AERIAL PLUG	E : AERIAL PLUG

According to ISO/DIS 10599

TECHNICAL DATA

FEATURES

FM - LW - MW - RDS EON
SCA Deck
CD changer driver (D2B)
Remote display (VAN)
Security code always activated.

GENERAL

Power supply :14.4V DC
Dimensions :180x150x51 mm

RADIO

LW : 144-288 KHz
MW : 531-1629 KHz
FM : 87.5-108 MHz
IF-AM (1/2) : 10.7 MHz/450 KHz
IF-FM (1/2) : 72.2 MHz/10.7 MHz
Sensitivity 26dB S/N : 30 μ V (LW)
: 25 μ V (MW)
: 2.5 μ V (FM)
Limitation α -3dB : 3 < 5.5 μ V < 14 at T° = 25°C

CASSETTE

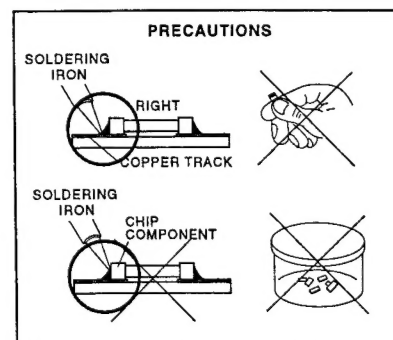
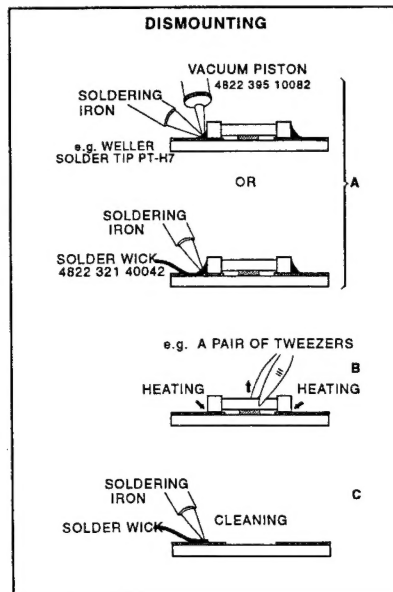
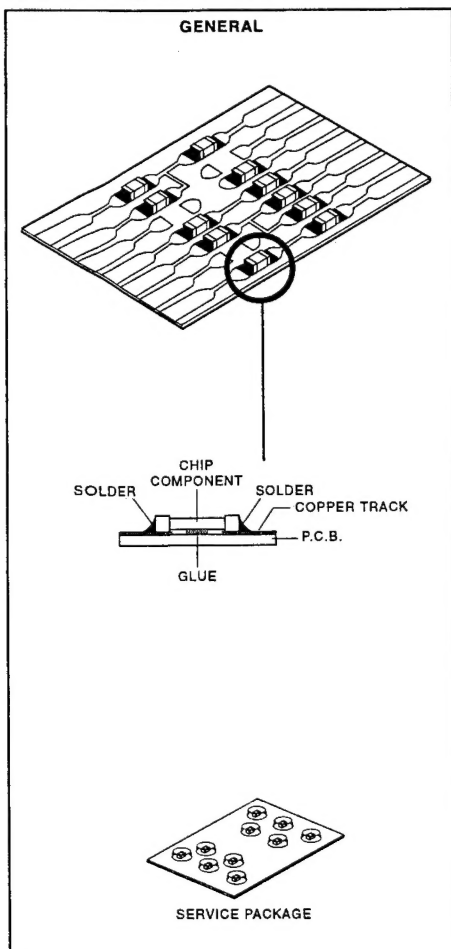
Cassette mechanism : SCA4.3
Number of tracks : 2x2
Tape speed : 4.76 cm/sec \pm 2%
Wow and flutter : < 0.3%
Crosstalk : > 32 dB

AMPLIFIER

Output power : 4x10 W / 4 Ω (D = 1%) (./65X)
4 X Line out : (./65Z)
Fader control : >35 dB
Balance control : >35 dB
Bass control : +11.5dB \pm 3dB
Treble control : +10dB \pm 3dB
Channel separation : >40 dB
Input sensibility CD in : 75mV \pm 2dB
(for 1W)

-THIS SET IS USED IN COMBINATION WITH A REMOTE DISPLAY AND A REMOTE CONTROL.
-IN CASE YOU NEED SUCH DEVICES, PLEASE CONTACT LOCALLY PEUGEOT TO GET
INFO ABOUT THESE DEVICES AND THEIR CONNECTION CABLES.

HANDLING CHIP COMPONENTS



22DC722/65X

Security Code

This set is protected by a security code. This code cannot be deactivated.
Each time the set is disconnected you will have to enter the code.

Entering the code: Suppose that the code is 7637

Set ON. The display shows.....

CODE

Press preset 1. The display shows.....

0----

Press UP or DOWN until the display shows.....

7----

Press preset 1 The display shows.....

70---

Pres UP or DOWN until the display shows.....

76---

and so on until the display shows.....

7637

Press preset 1 : The set bleeps and starts operating.

Keyboard test

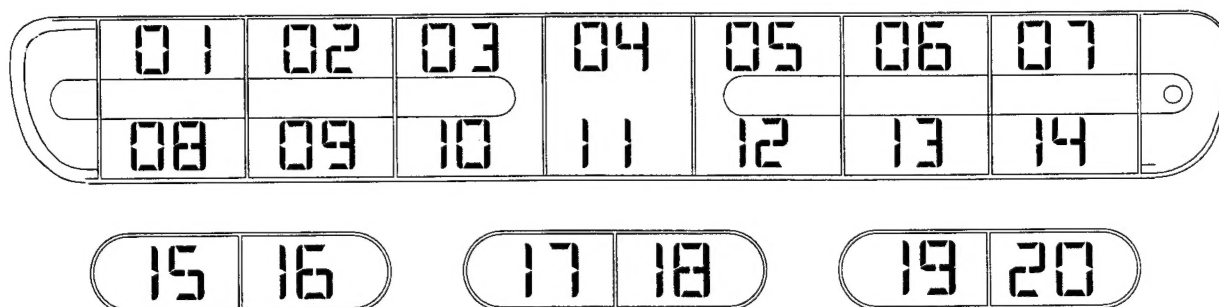
This test detects short circuits in the keyboard. If there is a short circuit, the display shows FALSE

This test is called by turning the set on while pressing key 3.

The display shows:

TX

Press each key, in any order. The display will show the number of the key pressed according to the following:



When each key has been pressed, and if there is no problem, the display shows:
Now starts the test of the remote control.

R XX

Press "MODE" on the remote control. The display shows

R 01

Press "SEARCH UP" on the remote control. The display shows

R 01

If the test is ok, the display shows

TEST OK

You can exit the test mode by switching the set OFF.

ESD



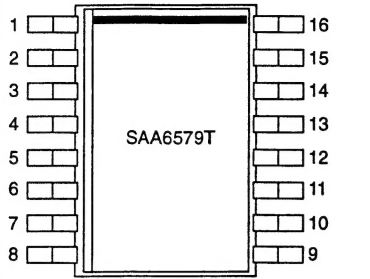
WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

INTEGRATED CIRCUITS

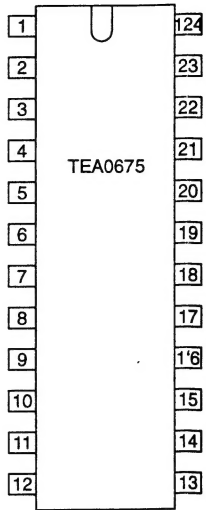
SAA6579T Radio Data System demodulator

SYMBOL	PIN	DESCRIPTION
QUAL	1	quality indication output
RDDA	2	RDS data output
V _{ref}	3	reference voltage output (0.5 V _{DDA})
MPX	4	multiplex input signal
V _{DDA}	5	+5V supply voltage for analog part
V _{SSA}	6	ground for analog part (0V)
CIN	7	subcarrier input to comparator
SCOUT	8	subcarrier output for reconstruction filter
TCTR	9	test control
TEN	10	test enable
V _{SSD}	11	ground for digital part (0V)
V _{DD}	12	+5V supply voltage for digital part
OSCI	13	oscillator input
OSCO	14	oscillator output
T57	15	57kHz clock signal output
RDCL	16	RDS clock output



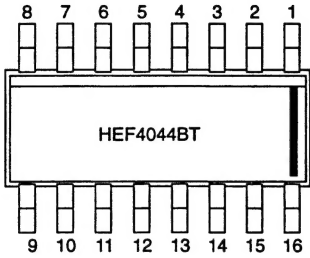
TEA0675 Dual Dolby B-type noise reduction circuit

SYMBOL	PIN	DESCRIPTION	SYMBOL	PIN	DESCRIPTION
OUTA	1	output channel A	INB2	13	input channel B2
INTA	2	integrating filter channel A	HS	14	headswitch input
CONTRA	3	control voltage channel A	INB1	15	input channel B1
HPA	4	high-pass filter channel A	GND	16	ground
SCA	5	side chain channel A	EQFB	17	equalizing input channel B
TD	6	delay time constant	EQB	18	equalizing output channel B
EQA	7	equalizing output channel A	AMSEQ	19	AMS output and EQ-switch input
EQFA	8	equalizing input channel A	SCB	20	side chain channel B
VCC	9	voltage supply	HPB	21	high-pass filter channel B
INA1	10	input channel A1	CONTRB	22	control voltage channel B
VREF	11	reference voltage	INTB	23	integrating filter channel B
INA2	12	input channel A2	OUTB	24	output channel B



HEF4044BT Quad R/S latch with 3-state outputs

SYMBOL	PIN	DESCRIPTION
O ₃	1	3-state buffered latch output 3
n.c	2	
\bar{S}_0	3	set input 0 (active LOW)
\bar{R}_0	4	reset input 0 (active LOW)
E0	5	common output enable input
\bar{R}_1	6	reset input 1 (active LOW)
\bar{S}_1	7	set input 1 (active LOW)
V _{SS}	8	ground
O ₁	9	3-state buffered latch output 1
O ₂	10	3-state buffered latch output 2
\bar{S}_2	11	set input 2 (active LOW)
\bar{R}_2	12	reset input 2 (active LOW)
O ₀	13	3-state buffered latch output 0
\bar{R}_3	14	reset input 3 (active LOW)
\bar{S}_3	15	set input 3 (active LOW)
V _{DD}	16	supply

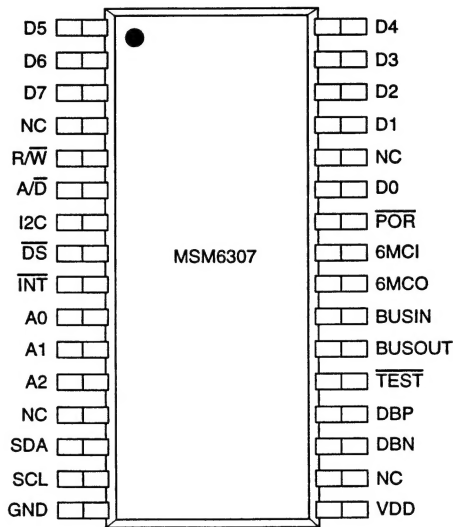


inputs			output
E0	\bar{S}_n	\bar{R}_n	O _n
L	X	X	Z
H	L	H	H
H	X	L	L
H	H	H	latched

Z = high impedance OFF-state

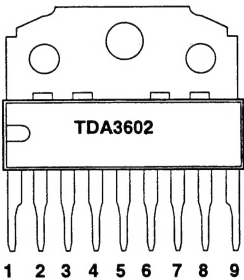
MSM6307GS D²B IC

SYMBOL	I/O	DESCRIPTION
POR	I	Power on - reset
R / W	I	Read / Write selector
\bar{DS}	I	Data strobe to access data bus
A / \bar{D}	I	Selects address or data on D0 ~ d7
SDA	I/O	I ² C data signal input / output
SCL	I/O	I ² C clock signal input / output
I2C	I	Selects I ² C or parallel interface
INT	O	Interrupt output
BUSIN	I	D2B input (TTL level)
BUSOUT	O	D2B output (TTL level)
DBN & DBP	I/Os	Differential D2B lines of the internal driver/receiver, to be terminated with 60Ω
TEST	I	Selects the test mode for factory purposes
6MCI	I	Clock input 6MHz resonator or X-TAL
6MCO	O	Clock output 6MHz resonator or X-TAL
D0 ~ D7	I/Os	8-bit bi-directional address or data bus
A0 ~ A2	I	Programmables I ² C slave addresses



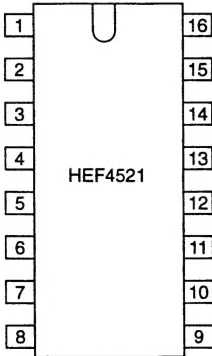
TDA3602 Multiple output voltage regulator

SYMBOL	PIN	DESCRIPTION
V _p	1	positive supply voltage
REG1	2	regulator 1 output
RESET	3	reset output
SCI	4	state control input
HOLD	5	hold output
GND	6	ground
REG3	7	regulator 3 output
V _{bu}	8	back-up
REG2	9	regulator 2 output

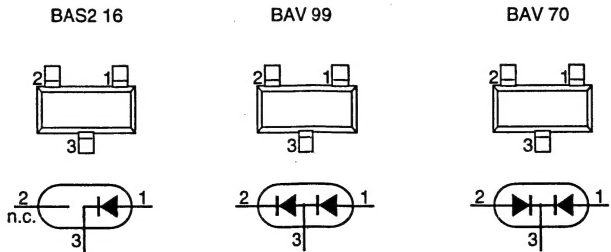


HEF4521BP 24-stage frequency divider

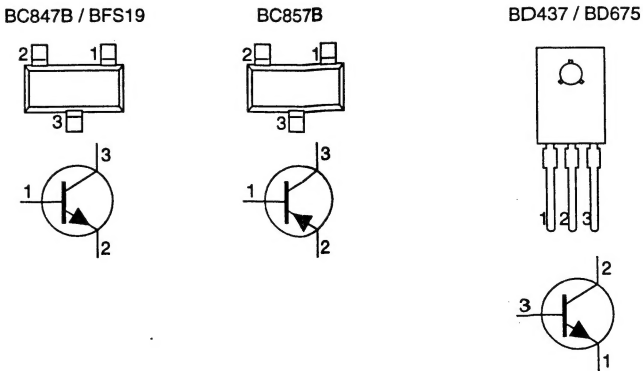
SYMBOL	PIN	DESCRIPTION
O ₂₄	1	output 2 ²⁴
MR	2	asynchronous master reset
V _{SS}	3	
O ₂	4	
V _{DD}	5	
I ₂	6	
O ₁	7	
V _{SS}	8	ground
I ₁	9	
O ₁₈	10	output 2 ¹⁸
O ₁₉	11	output 2 ¹⁹
O ₂₀	12	output 2 ²⁰
O ₂₁	13	output 2 ²¹
O ₂₂	14	output 2 ²²
O ₂₃	15	set input 3 (active LOW)
V _{DD}	16	power supply



DIODES



TRANSISTORS



DC VOLTAGES

All measurements in FM, set tuned, 0dB at output.
All settings in mid position. Values are given for indication only.

IC96 TUNER MODULE

1 = 0.5 V
2 = GND
3 = N.C.
4 = N.C.
5 = N.C.
6 = 5.0 V
7 = 8.5 V
8 = GND
9 = 5.0 V
10 = 5.1 V
11 = 3.2 V
12 = 5.0 V
13 = 5.0 V
14 = 5.0 V
15 = N.C.
16 = 3.8 V
17 = 3.8 V
18 = GND
19 = N.C.
20 = N.C.

7257 LA2000

1 = 1.8 V
2 = 7.3 V
3 = 2.1 V
4 = N.C.
5 = GND
6 = 5.0 V
7 = N.C.
8 = N.C.
9 = 8.5 V

7350 TDA8579T

1 = 3.9 V
2 = 4.5 V
3 = 3.8 V
4 = 5.0 V
5 = GND
6 = 4.4 V
7 = 4.4 V
8 = 8.5 V

7354 TEA6320

1 = 5.0 V
2 = GND
3 = 4.0 V
4 = 3.9 V
5 = 3.9 V
6 = 3.9 V
7 = 3.8 V
8 = 3.5 V
9 = 3.8 V
10 = 3.7 V
11 = N.C.
12 = 7.6 V
13 = 6.0 V
14 = 3.8 V
15 = 3.8 V
16 = 3.7 V
17 = 3.7 V
18 = 3.8 V
19 = 7.6 V
20 = 6.0 V
21 = 3.9 V
22 = N.C.
23 = 3.7 V
24 = 3.8 V
25 = 3.5 V
26 = 3.9 V
27 = 3.9 V
28 = 3.9 V
29 = 3.9 V
30 = 3.9 V
31 = 7.6 V
32 = 4.9 V

7355 SAA6579T

1 = N.C.
2 = 3.1 V
3 = 2.5 V
4 = 2.5 V
5 = 4.9 V
6 = GND
7 = 2.3 V
8 = 2.5 V
9 = GND
10 = GND
11 = GND
12 = 4.9 V
13 = 4.332 MHz
14 = 4.332 MHz
15 = N.C.
16 = 3.5 V


7356 TL074

1 = 4.2 V
2 = 4.2 V
3 = 4.1 V
4 = 8.2 V
5 = 4.1 V
6 = 4.3 V
7 = 4.2 V
8 = 4.2 V
9 = 4.3 V
10 = 4.1 V
11 = GND
12 = 4.2 V
13 = 4.2 V
14 = 4.2 V

7601 ST24C16

1 = 5.0 V
2 = 5.0 V
3 = 5.0 V
4 = GND
5 = 5.0 V SDA
6 = 5.0 V SCL
7 = GND
8 = 5.0 V

7602 HEF4521

1 = N.C.
2 = GND
3 = 0.0 V
4 = 4.194 MHz
5 = 4.194 MHz
6 = 4.194 MHz
7 = N.C.
8 = GND
9 = GND
10 = N.C.
11 = N.C.
12 = N.C.
13 = N.C.
14 = 1 Hz 
15 = N.C.
16 = 5.0 V

7603 MSM6307GS

1 = 5.0 V
2 = 5.0 V
3 = 5.0 V
4 = N.C.
5 = 5.0 V
6 = 5.0 V
7 = 5.0 V
8 = 5.0 V
9 = 5.0 V
10 = 5.0 V
11 = 5.0 V
12 = 5.0 V
13 = N.C.
14 = 4.9 V SDA
15 = 4.9 V SCL
16 = GND
17 = 5.0 V
18 = N.C.
19 = 2.3 V
20 = 2.3 V
21 = 5.0 V
22 = N.C.
23 = 5.0 V
24 = 5.75 MHz
25 = 5.75 MHz
26 = 4.8 V
27 = 5.0 V
28 = N.C.
29 = 5.0 V
30 = 5.0 V
31 = 5.0 V
32 = 5.0 V

7800 TDA3602

1 = 13.4 V
2 = 8.5 V
3 = N.C.
4 = 0.6 V
5 = 5.0 V
6 = GND
7 = 5.0 V
8 = 13.2 V
9 = 5.0 V

7862 HEF 4044BT

1 = 0.0 V
2 = N.C.
3 = 3.5 V
4 = 0.0 V
5 = 5.0 V
6 = 4.0 V
7 = 5.0 V
8 = GND
9 = 5.0 V
10 = 0.0 V
11 = 4.8 V
12 = 5.0 V
13 = 5.0 V
14 = 5.0 V
15 = 4.0 V
16 = 5.0 V

Check and Alignment

No alignment is needed for radio part. IC96 tuner is pre-aligned.

For all measurement, please refer to "General Check & Alignment procedures for Car Systems'
4822 725 25456, unless otherwise stated

Dolby alignment:

cassette	adjust	
MTT 150 F = 400 Hz/ 200 nWb	3260 and 3261	AC voltage at pin 1 & 24 of 7251 = 387.5 mV +/- 50mV

Checks:

Supply voltages (set Off)

SET OFF	Voltage	Current + Acc ON	Current + Acc OFF	Pin 14 µP	Pin 69 µP
Acc supply	+14.4V	< 3mA		min 4.8V max 5.2V	max 0.8V
Perm supply	+14.4V	< 3mA	< 3mA		

Supply voltages (set On)

device	µP	µP	µP	TDA3602	TDA3602	EEprom
pin	30 (reset)	14 (supply)	69 (hold)	9 (5V)	2 (8.5V)	8
Voltage	max 0.8V	min 4.8V max 5.2V	min 2.0V max 5.7V	min 4.8V max 5.2V	min 8.2V max 8.8V	min 4.8V max 5.2V

Reference oscillator frequencies

device	MSM 6307	µP	SAA6579T
pin	24 & 25	51 & 52	13 & 14
frequency	5.75 MHz 0.5%	11.5 MHz 0.5%	4.332 MHz 60 ppm

FM mute:

98 MHz 1mV	output at load resistor R & L = 775 mV = REF
no signal	output should be < -20 dB (REF - 20 dB)

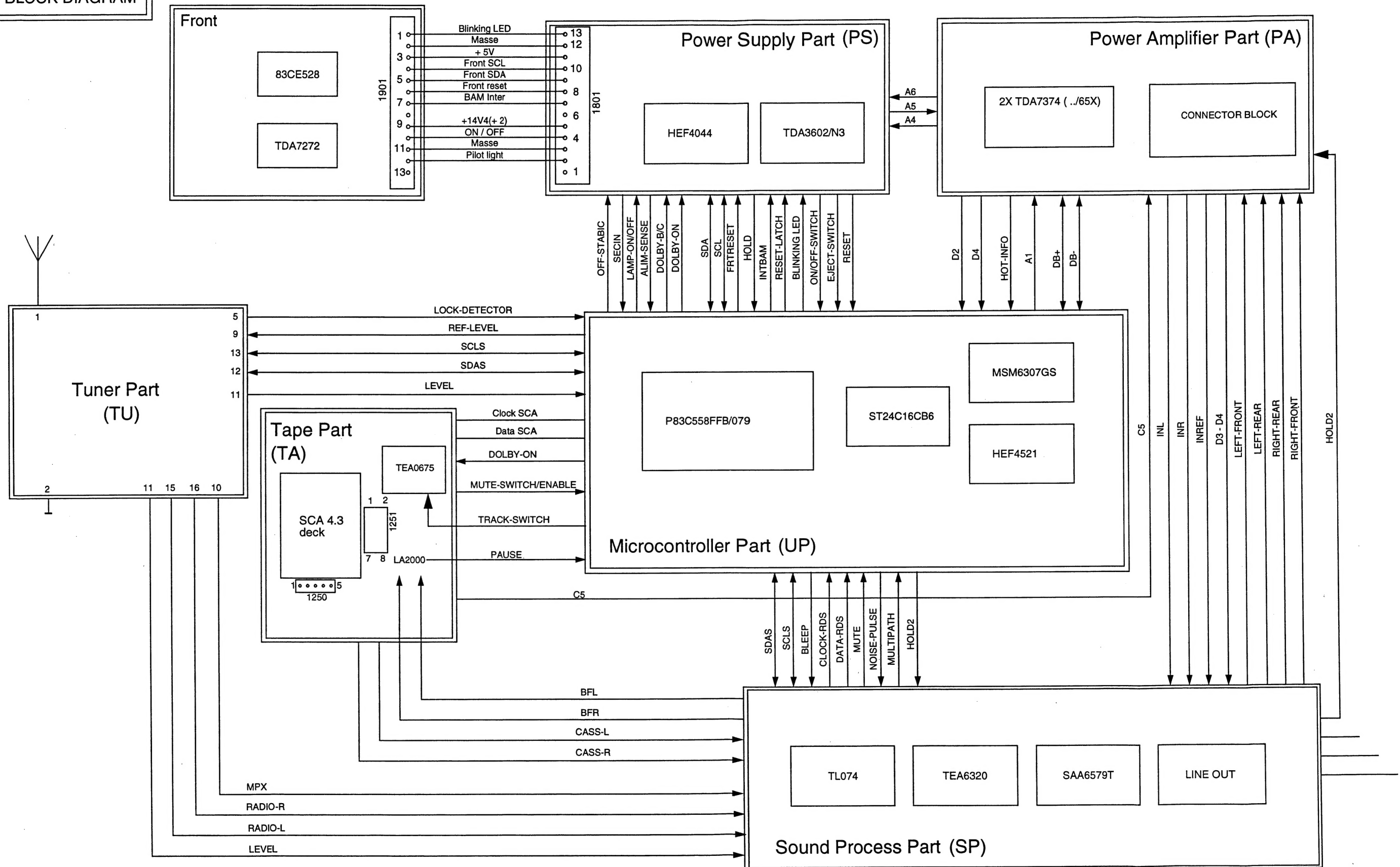
Demodulated FM levels

Input	Output of IC91 (pin 16 & 17)
98 MHz	300 mV ± 50 mV

Limiting point α-3dB

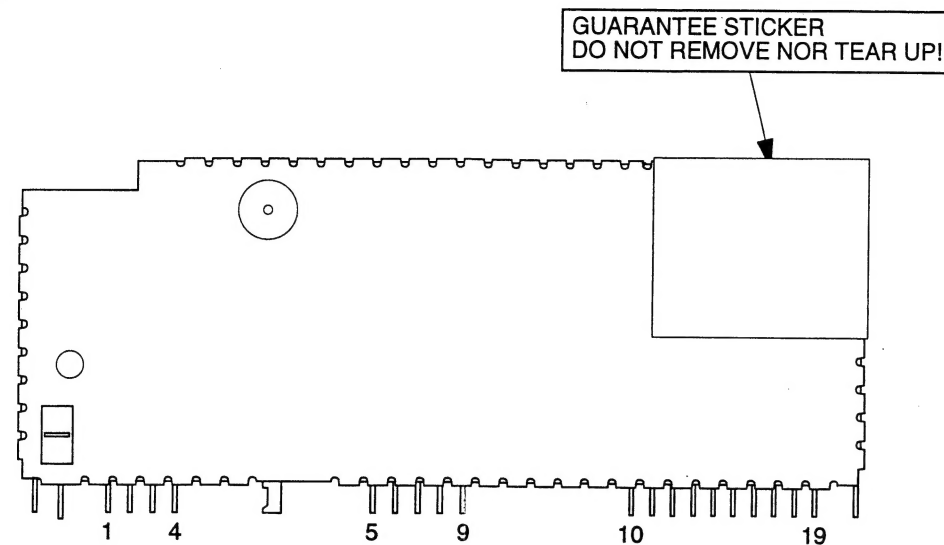
Range	Input	min	nominal	max
87.5 to 108 MHz	1mV 400Hz	3µV	5.5µV	14µV

22DC722/65X../65Z
BLOCK DIAGRAM



IC96 MODULE

Not reparable module. Do not open and do not try to repair yourself!

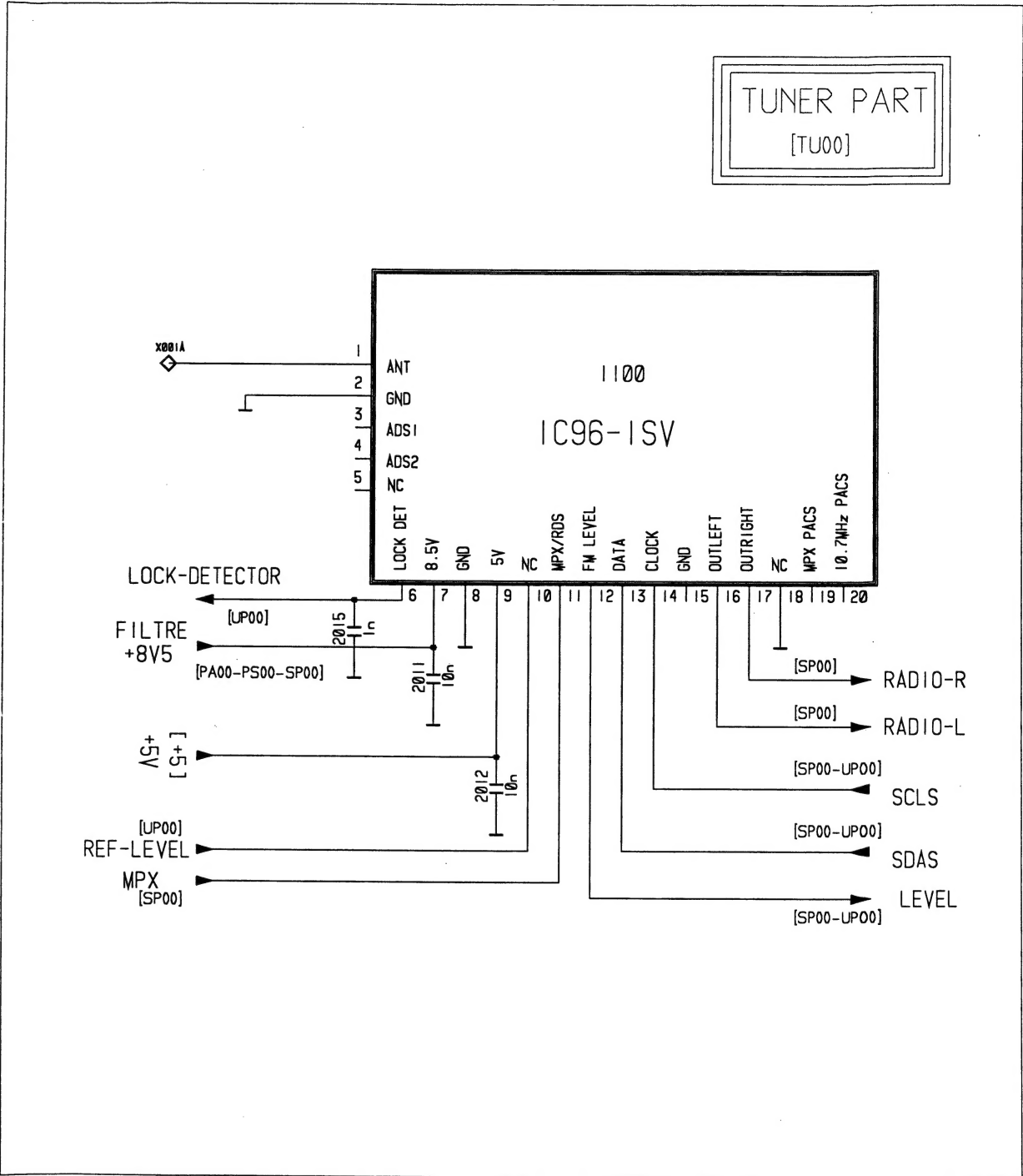


Connections

- | | |
|-----------------------|----------------------------------|
| 1 AM/FM Aerial input | 10 Multiplex / RDS output signal |
| 2 Ground | 11 Unweighted level output |
| | 12 I ² C SDA |
| 5 Inlock detector pin | 13 I ² C SCL |
| 6 Vcc 8.5V | 14 SDS time constant pin |
| 7 Ground | 17 Ground |
| 8 Vcc 5.0V | 19 AM audio output |
| 9 V reference | |

Quick reference data:

- | | |
|--|--|
| 1) AM part | 1) FM part |
| -Longwave/Mediumwave 144-1710 KHz (inclusive USA) | -FM 87.5 - 108MHz |
| -Shortwave 5850-6250 KHz - 49 meter band | -FM double super concept |
| -AM double super concept | -FM IF1 72.2MHz |
| -AM IF1 10.7MHz | -FM IF2 10.7MHz |
| -AM IF2 450KHz | -First VCO frequency above input signal frequency |
| -First VCO frequency above input signal frequency | -Second X-tal oscillator frequency below IF1 |
| -Second X-tal oscillator frequency below IF1 | -Usable sensitivity $\alpha 26\text{dB} = 2.5\mu\text{V typ.}$ |
| -Usable sensitivity $\alpha 26\text{dB MW} = 14\mu\text{V typ.}$ | -THD 1mV $\delta f = 75\text{KHz} = 0.5\% \text{ typ}$ |
| | -Signal to noise ratio = 65dB typ |
| | -Locktime synthetizer <2mSec |



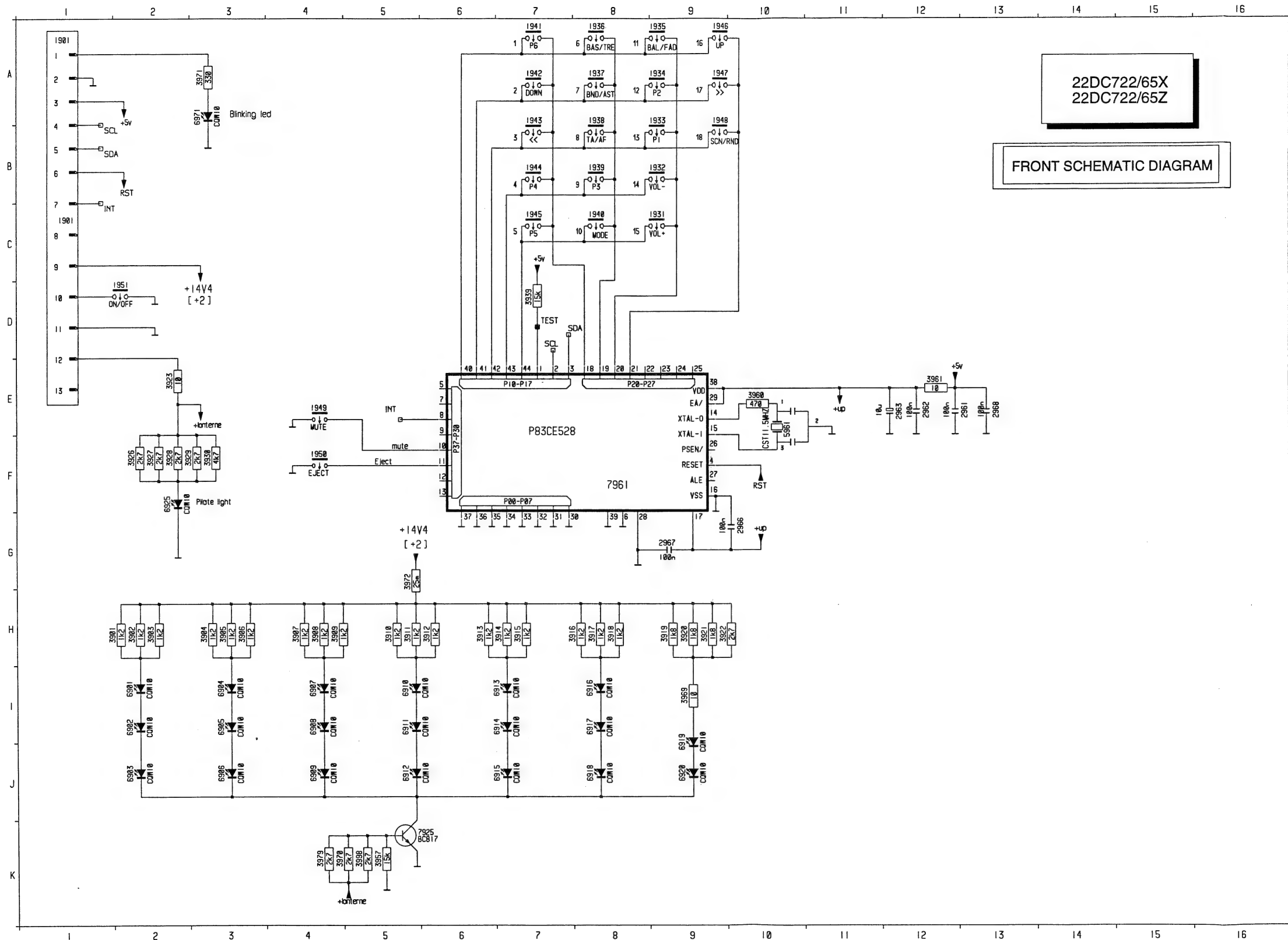
Technician's remarks

If you have some remarks or requests about this manual, please send them directly to:

Daniel GIRIN
Customer support Service
Technical documentation
BP65 - 1, rue de Clairefontaine
78512 RAMBOUILLET CEDEX

Tel: (1) 34 83 70 00 Ext 7421
FAX: (1) 34 83 71 77

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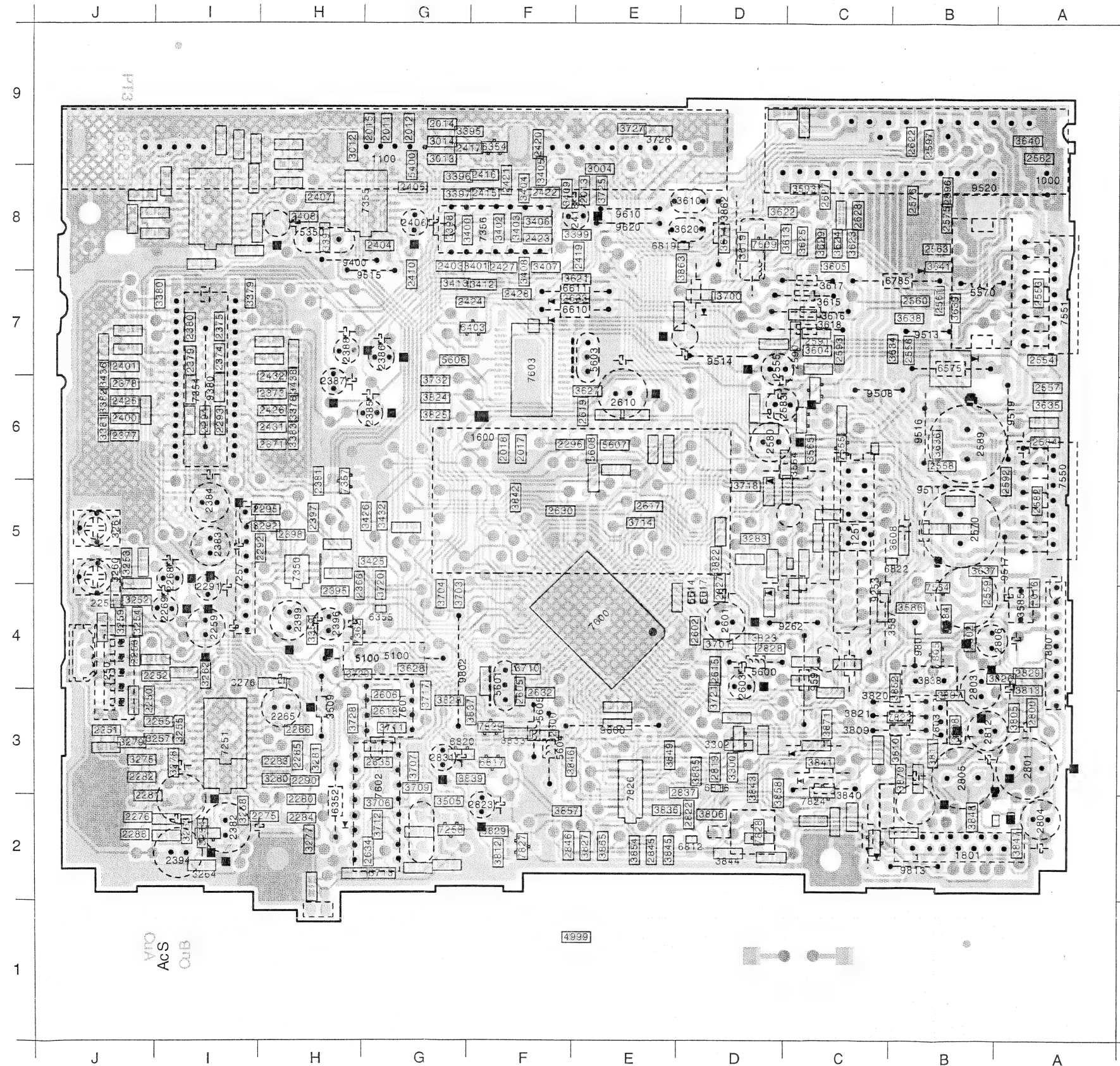
22DC722/65X
22DC722/65Z

FRONT SCHEMATIC DIAGRAM

1901	A 1	6903	J 2
1901	C 1	6904	I 3
1931	C 9	6905	I 3
1932	B 9	6906	J 3
1933	A 9	6907	I 4
1934	A 9	6908	I 4
1935	A 9	6909	J 4
1936	A 8	6910	I 5
1937	A 8	6911	I 5
1938	A 8	6912	J 5
1939	B 8	6913	I 7
1940	C 8	6914	I 7
1941	A 7	6915	J 7
1942	A 7	6916	I 8
1943	A 7	6917	I 8
1944	B 7	6918	J 8
1945	C 7	6919	I 9
1946	A 9	6920	J 9
1947	A 9	6925	F 2
1948	A 9	6971	A 3
1949	E 4	7925	K 5
1950	F 4	7961	F 8
1951	D 2		
2961	E13		
2962	E12		
2963	E12		
2966	G10		
2967	G 9		
2968	E13		
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3902	H 2		
3903	H 2		
3904	H 3		
3905	H 3		
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3908	H 4		
3909	H 4		
3910	H 5		
3911	H 5		
3912	H 6		
3913	H 6		
3914	H 7		
3915	H 7		
3916	H 8		
3917	H 8		
3918	H 8		
3919	H 9		
3920	H 9		
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3923	E 2		
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3927	F 2		
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3929	F 3		
3930	F 3		
3939	D 7		
3957	K 5		
3960	E10		
3961	E12		
3969	I 9		
3970	K 4		
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6902	I 2		

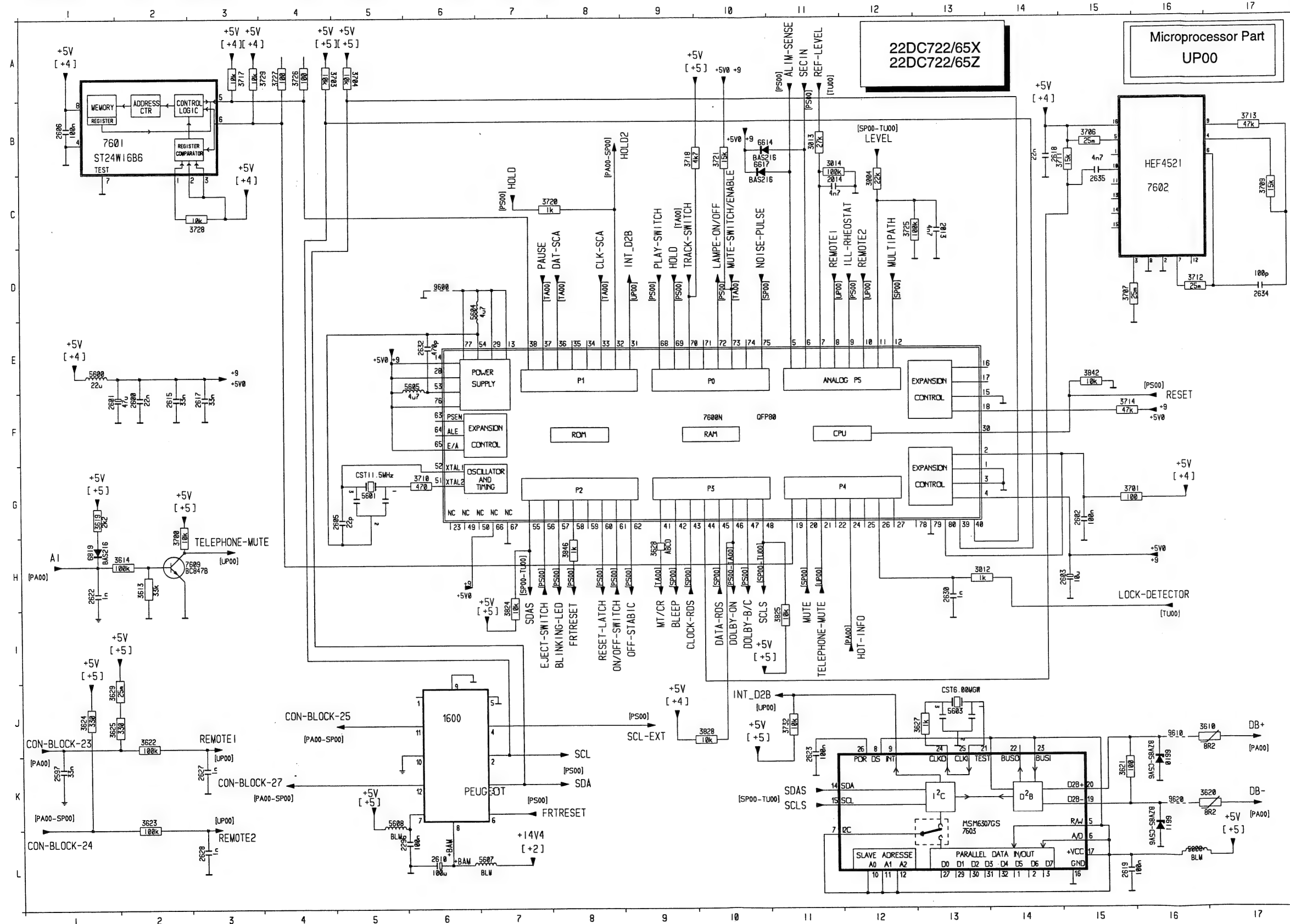
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1100 G 8	2268 I 4	2386 G 6	2418 E 7	2603 D 3	2812 B 2	3610 D 7	3820 B 3	5570 B 7	6610 E 6	7551 A 7	9380 I 6	9516 B 5	9620 E 7
1250 J 3	2269 I 4	2387 H 6	2555 D 6	2610 E 6	2823 F 2	3615 C 7	3821 B 3	5600 D 3	6611 E 7	7601 G 3	9400 H 7	9517 A 4	9801 B 3
1251 C 4	2291 I 4	2388 H 6	2570 B 4	2801 A 2	2831 G 2	3616 C 6	3838 B 3	5601 F 3	6785 B 7	7602 G 2	9508 C 6	9519 A 5	9802 G 3
1600 F 5	2382 I 2	2394 I 1	2580 D 5	2803 B 3	3260 J 4	3617 C 7	3840 C 2	5603 E 6	7257 I 4	7800 A 3	9511 B 5	9520 B 3	9813 B 1
1801 B 1	2383 I 4	2396 H 3	2583 D 6	2804 A 2	3261 J 4	3618 C 6	3862 D 7	5604 F 2	7354 I 6	7803 B 3	9513 B 6	9597 C 3	
2259 I 3	2384 I 5	2399 H 3	2589 B 5	2805 B 2	3509 H 3	3620 D 7	5100 G 3	5605 F 2	7356 F 7	9253 C 4	9514 D 6	9600 E 2	

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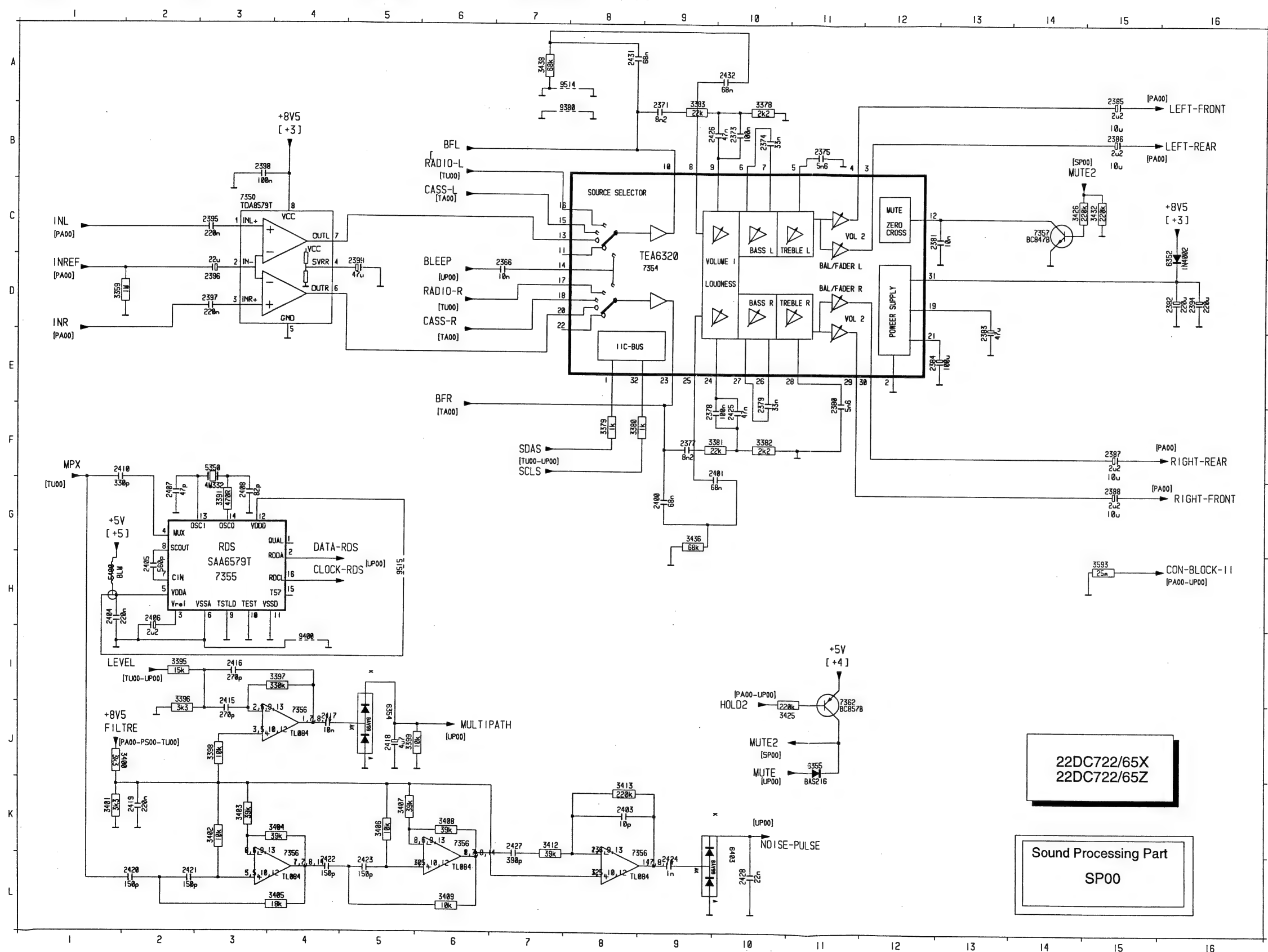
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2014 G 8	2590 C 6	3406 F 7	3829 F 1
2015 G 8	2591 C 6	3407 F 7	3833 F 2
2016 A 4	2592 A 5	3408 F 7	3835 D 2
2017 F 5	2593 C 6	3409 F 8	3836 E 2
2018 F 5	2596 B 8	3412 F 7	3837 F 3
2250 J 3	2597 B 8	3413 G 7	3839 F 2
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2253 J 3	2605 F 3	3432 G 4	3843 D 2
2254 J 4	2606 G 3	3436 J 6	3844 D 1
2255 I 3	2615 D 3	3438 H 6	3845 E 1
2266 H 2	2617 E 5	3505 G 2	3846 E 2
2275 H 2	2618 G 3	3564 C 5	3847 A 1
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2280 H 2	2622 B 8	3584 B 4	3849 E 2
2281 J 2	2623 E 7	3586 B 4	3852 B 3
2282 J 2	2627 C 8	3587 C 4	3854 E 1
2283 H 2	2628 C 7	3593 C 8	3855 E 1
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2285 H 2	2632 F 3	3605 C 7	3858 D 2
2288 J 1	2634 G 1	3608 B 4	3863 D 7
2290 H 2	2635 G 2	3613 C 7	3870 B 2
2292 H 4	2800 A 3	3614 D 7	3871 C 3
2293 I 5	2802 B 3	3619 D 7	4999 E 1
2294 I 5	2819 D 2	3621 E 7	5400 G 8
2295 H 5	2822 D 2	3622 D 7	5606 G 6
2296 F 5	2827 D 4	3623 C 7	5607 E 5
2366 H 4	2828 D 3	3624 C 7	5608 E 5
2371 H 5	2829 A 3	3625 C 7	6354 F 8
2373 H 6	2837 D 2	3627 E 6	6355 G 4
2374 I 6	2845 E 1	3628 G 3	6403 F 6
2375 I 6	2846 F 1	3629 C 7	6575 B 6
2377 J 5	3004 E 8	3634 B 6	6614 D 4
2378 J 6	3012 H 8	3635 A 6	6617 D 4
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2380 I 6	3014 G 8	3637 B 4	6816 D 2
2381 H 5	3252 J 4	3638 B 6	6817 F 2
2395 H 4	3253 J 4	3639 B 6	6819 D 7
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2408 H 7	3275 J 2	3709 G 2	7554 B 4
2410 G 7	3276 H 3	3710 F 3	7555 C 5
2415 F 8	3277 H 1	3711 G 2	7600 E 3
2416 F 8	3278 I 2	3712 G 2	7603 F 6
2417 F 8	3279 J 2	3713 G 1	7609 D 7
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2420 F 8	3281 H 2	3717 G 3	7823 B 3
2421 F 8	3283 D 4	3718 D 5	7824 C 2
2422 F 8	3292 H 4	3720 G 4	7826 E 2
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2424 F 7	3300 D 2	3725 E 8	7828 D 1
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2431 H 5	3380 I 7	3732 G 6	
2432 H 6	3381 J 5	3805 A 3	
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2560 B 7	3398 G 7	3813 A 3	
2561 B 7	3399 E 7	3822 D 4	
2562 A 8	3400 G 7	3823 D 3	
2563 B 7	3401 F 7	3824 G 6	
2575 B 7	3402 F 7	3825 G 5	

A1.....H1	CON-BLOCK-23.....J1	DB+.....J17	HOLD.....C7/D9	LEVEL.....B12	NOISE-PULSE.....D10	REMOTE 1.....J3/D11	SCLS.....H10/K11
ALIM-SENSE.....A11	CON-BLOCK-24.....K1	DB-.....K17	HOLD2.....B8	LOCK-DETECTOR.....H16	OFF-STABIC.....H9	REMOTE 2.....L3/D12	SDA.....K7
BLEEP.....H9	CON-BLOCK-25.....J5	DOLBY-B/C.....H10	HOT-INFO.....I12	MT/CR.....H9	ON/OFF-SWITCH.....H8	RESET.....F16	SDAS.....H7/K11
BLINKING-LED.....H8	CON-BLOCK-27.....K3	DOLBY-ON.....H10	ILL-RHEOSTAT.....D12	MULTIPATH.....D12	PAUSE.....D7	RESET-LATCH.....H8	SECIN.....A11
CLK-SCA.....D8	DAT-SCA.....D8	EJECT-SWITCH.....H7	INT_D2B.....D9/J11	MUTE.....H11	PLAY-SWITCH.....D9	SCL.....K7	TELEPHONE-MUTE.....H11/H3
CLOCK-RDS.....H9	DATA-RDS.....H10	FRTRESET.....H8/K8	LAMPE-ON/OFF.....D10	MUTE-SWITCH/ENABLE.....D10	REF-LEVEL.....A11	SCL-EXT.....J9	TRACK-SWITCH.....D9



1600 J 6	5603 J13
2013 C13	5604 D 6
2014 C11	5605 E 6
2296 L 5	5606 L16
2597 K 1	5607 L 7
2600 F 2	5608 K 5
2601 F 1	6610 K16
2602 G15	6611 L16
2603 H15	6614 B10
2605 G 5	6617 B10
2606 B 1	6819 H 1
2610 L 6	7600 F10
2615 F 2	7601 B 1
2617 F 3	7602 C16
2618 B14	7603 L13
2619 L15	7609 H 2
2622 H 1	9600 D 6
2623 J11	9610 J16
2627 K 3	9620 K16
2628 L 3	
2630 H13	
2632 E 6	
2634 D17	
2635 C15	
3004 C12	
3012 H13	
3013 B11	
3014 B11	
3610 J17	
3613 H 2	
3614 H 2	
3619 G 1	
3620 K17	
3621 K15	
3622 J 2	
3623 K 2	
3624 J 1	
3625 J 1	
3627 J13	
3628 H 9	
3629 J 1	
3700 G 2	
3701 G15	
3703 A 5	
3704 A 5	
3706 B15	
3707 D15	
3709 C17	
3710 G 6	
3711 B15	
3712 D16	
3713 B17	
3714 F15	
3717 A 3	
3718 B 9	
3720 C 8	
3721 B10	
3725 C12	
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3727 A 4	
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3729 A 4	
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3824 H 7	
3825 I11	
3828 J10	
3842 E15	
3846 H 8	
5600 E 1	
5601 G 5	

BFL.....B6	CON-BLOCK.....H16	INREF.....D1	MUTE.....J11	RIGHT-REAR.....F15
BFR.....E6	DATA-RDS.....H4	LEFT-FRONT.....A16	MUTE2.....J11/C14	SCLS.....F7
BLEEP.....D6	FILTRE.....J1	LEFT-REAR.....B16	NOISE-PULSE.....K10	SDAS.....F7
CASS-L.....C6	HOLD2.....H10	LEVEL.....J2	RADIO-L.....B6	
CASS-R.....D6	INL.....C1	MPX.....F1	RADIO-R.....D6	
CLOCK-RDS.....H4	INR.....D1	MULTIPATH.....J6	RIGHT-FRONT.....G16	

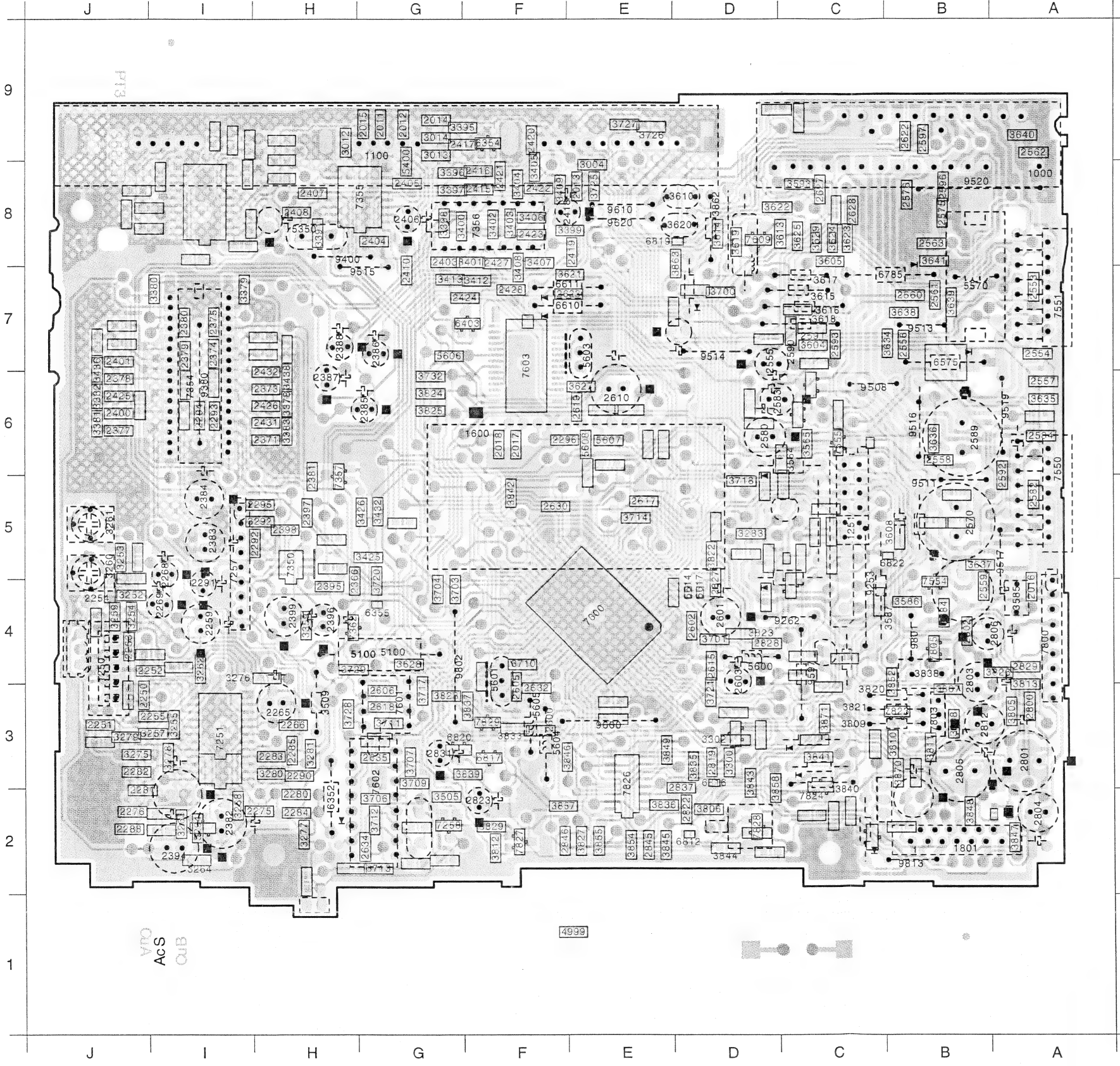


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2371	B 9	3412	K 7
2373	B10	3413	K 8
2374	B10	3425	J11
2375	B11	3426	C14
2377	F 9	3432	C15
2378	F 9	3436	G 9
2379	E10	3438	A 7
2380	E11	3593	H15
2381	C12	5350	F 3
2382	D16	5400	H 1
2383	D13	6352	C16
2384	E12	6354	J 5
2385	A15	6355	J11
2386	B15	6403	K10
2387	F15	7350	C 3
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2394	D16	7355	H 3
2395	C 3	7356	J 4
2396	D 3	7356	L 4
2397	D 3	7356	K 6
2398	B 3	7356	L 8
2399	D 5	7357	C14
2400	G 9	7362	I11
2401	F10	9380	B 7
2403	K 8	9400	I 4
2404	H 1	9514	A 7
2405	H 2	9515	H 5
2406	H 2		
2407	G 2		
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2410	F 1		
2415	J 3		
2416	I 3		
2417	J 4		
2418	J 5		
2419	K 2		
2420	L 2		
2421	L 2		
2422	L 4		
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2426	B 9		
2427	K 7		
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2432	A10		
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3378	B10		
3379	F 8		
3380	F 8		
3381	F10		
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3383	B 9		
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3395	I 2		
3396	J 2		
3397	I 4		
3398	J 3		
3399	J 5		
3400	J 2		
3401	K 1		
3402	K 3		
3403	K 3		
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3408	K 6		

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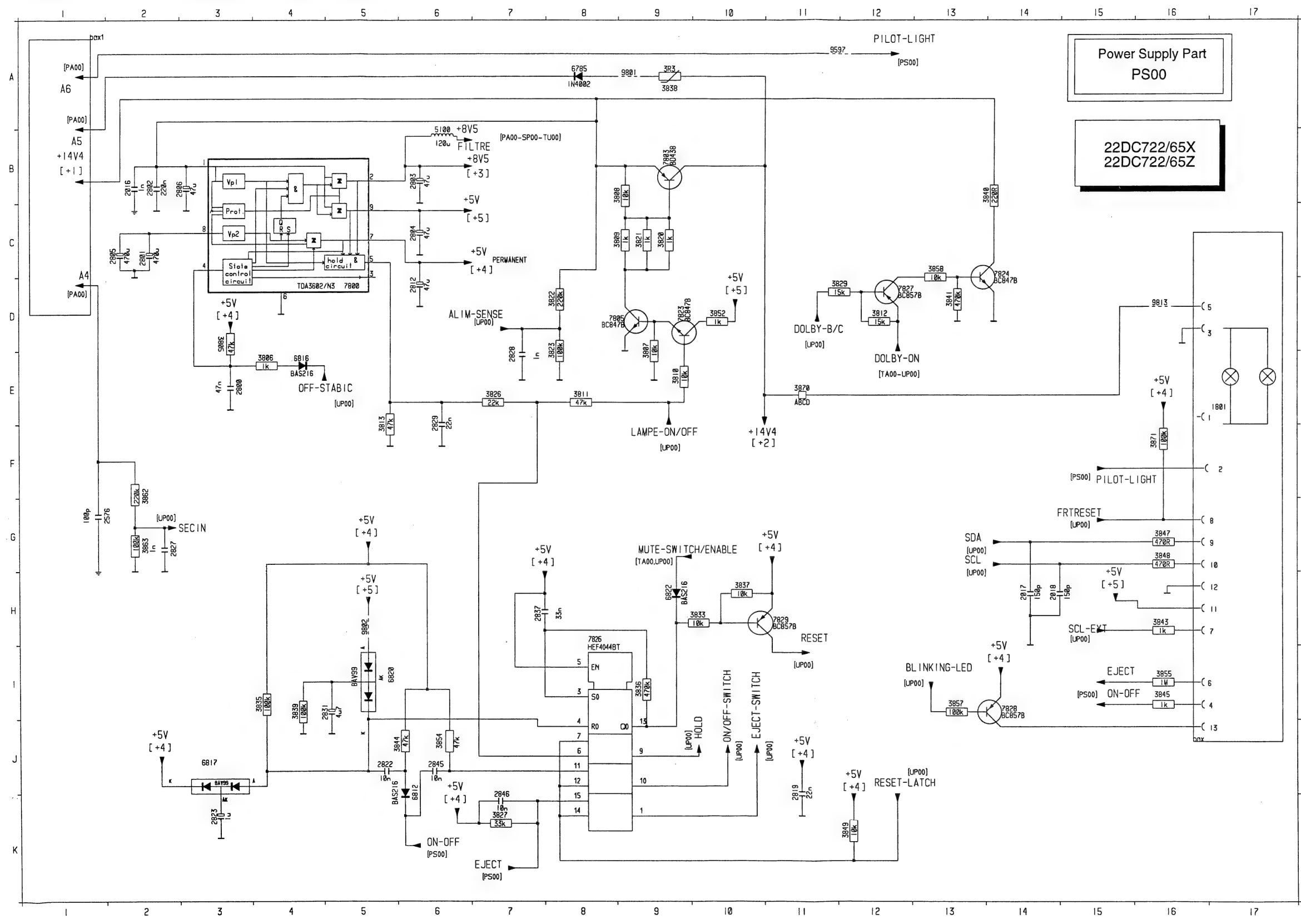
Sound Processing Part
SP00

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1100 G 8	2268 I 4	2386 G 6	2418 E 7	2603 D 3	2812 B 2	3610 D 7	3820 B 3	5570 B 7	6610 E 6	7551 A 7	9380 I 6	9516 B 5	9620 E 7
1250 J 3	2269 I 4	2387 H 6	2555 D 6	2610 E 6	2823 F 2	3615 C 7	3821 B 3	5600 D 3	6611 E 7	7601 G 3	9400 H 7	9517 A 4	9801 B 3
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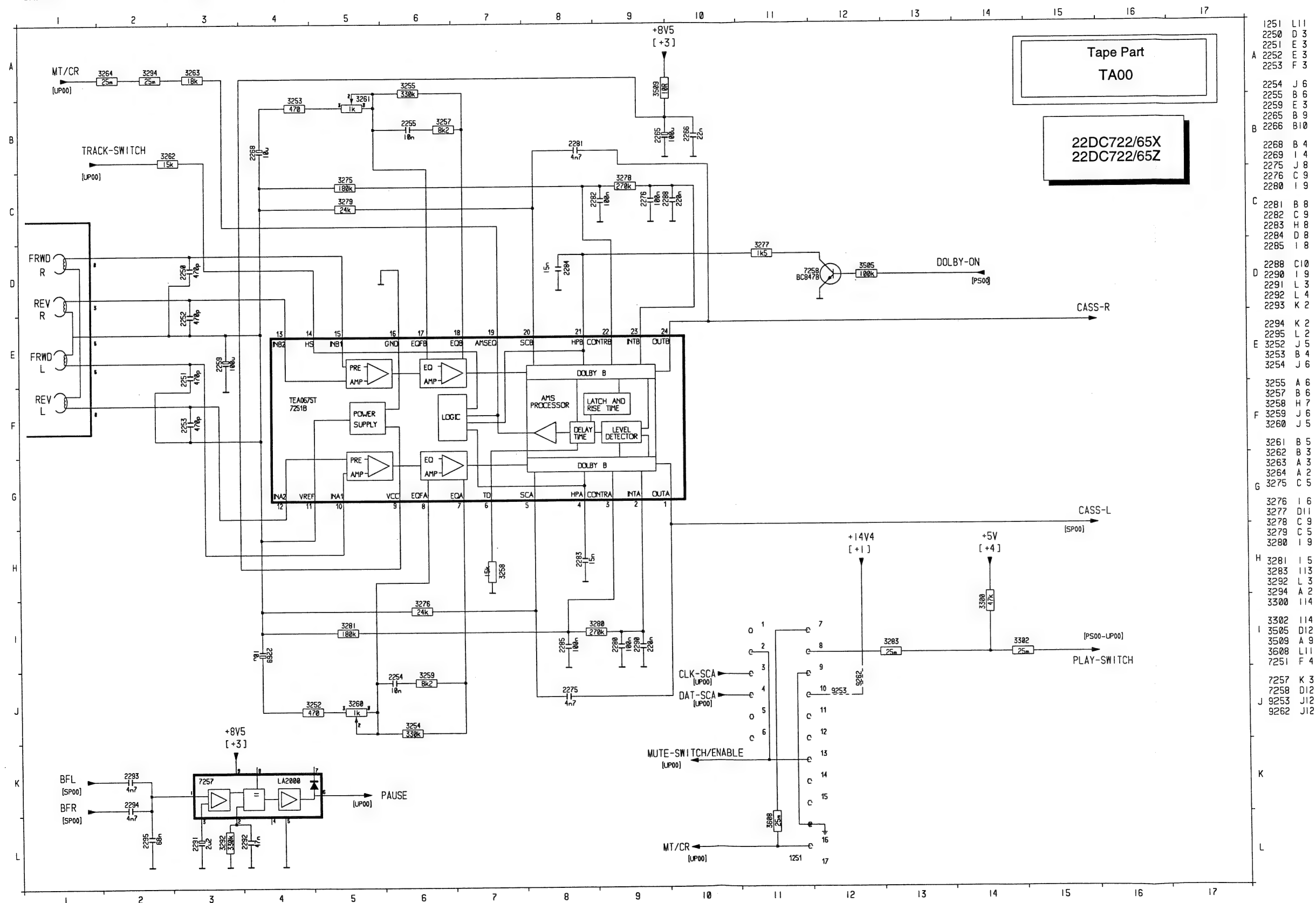
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2255 I 3	2615 D 3	3438 H 6	3845 E 1
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2553 A 7	3382 J 6	3806 D 2	
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2562 A 8	3400 G 7	3823 D 3	
2563 B 7	3401 F 7	3824 G 6	
2575 B 7	3402 F 7	3825 G 5	

A6.....A1	DOLBY-ON.....E12	MUTE-SWITCH/ENABLE...G9	RESET-LATCH.....K12
A5.....B1	EJECT.....K7/16	OFF-STABIC.....E5	SCL.....G14
A4.....D1	EJECT-SWITCH.....J10	ON/OFF.....K6/116	SCL-EXT.....H15
ALIM-SENSE.....D7	FRTRESET.....G15	ON/OFF-SWITCH.....J10	SDA.....G14
BLINKING-LED.....I13	HOLD.....J10	PILOT-LIGHT.....A12/F15	SECIN.....G2
DOLBY-B/C.....D11	LAMPE-ON/OFF.....E9	RESET.....I11	

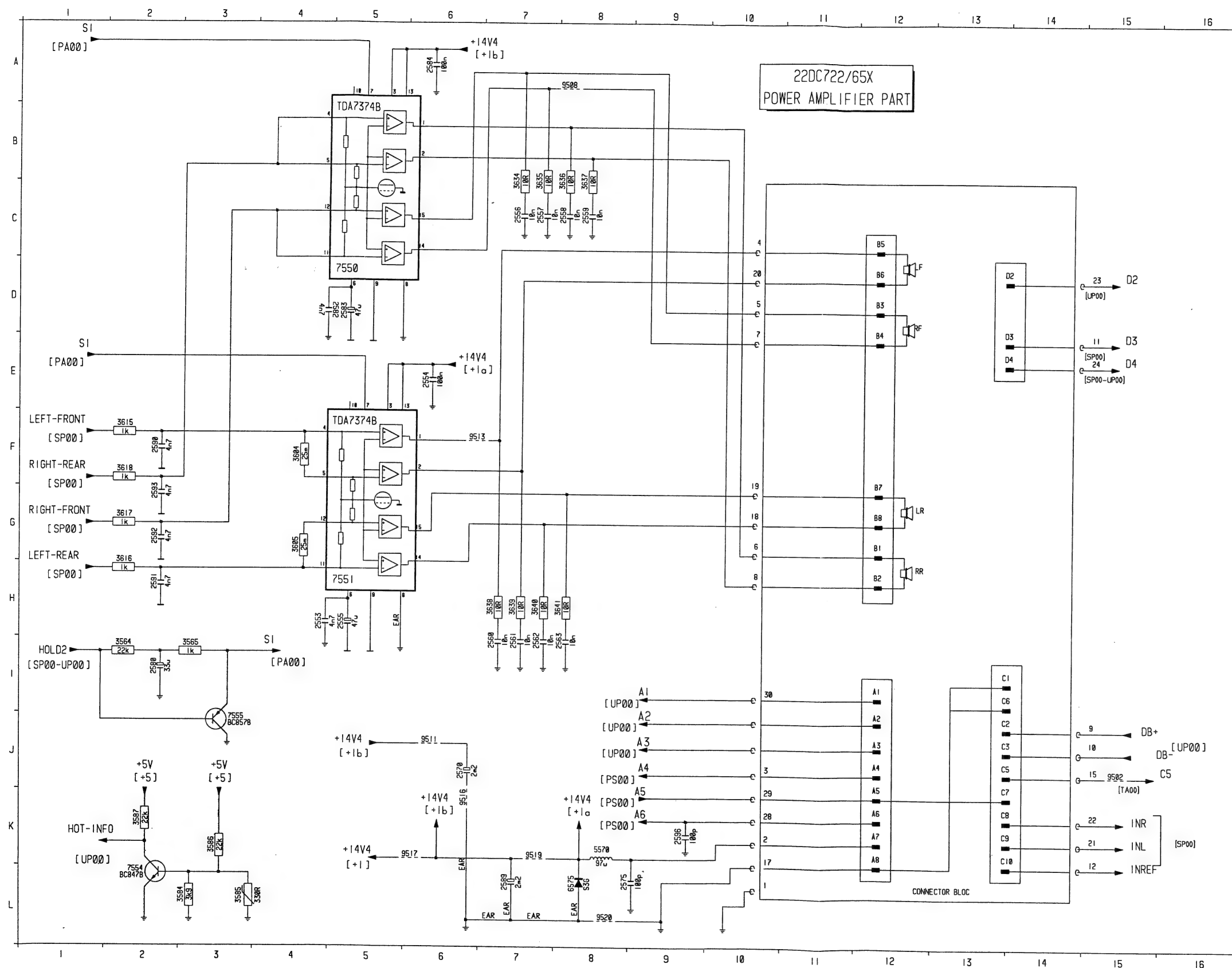


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2017	H14	7824	C14
2018	H14	7826	H 8
2576	G 1	7827	D12
2800	E 3	7828	I14
2801	C 2	7829	H11
2802	B 2	9597	A11
2803	B 6	9801	A 9
2804	C 6	9802	H 5
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6816	E 4		
6817	J 3		
6820	I 5		
6822	H 9		
7800	D 5		

BFLK2 DOLBY-OND14 PLAY-SWITCHJ15
 BFRK2 FRWD-LE1 REV-LF1
 CASS-LG16 FRWD-RD1 REV-RD1
 CASS-RE16 MT-CRA1/L11 TRACK-SWITCHB2
 CLK-SCAJ11 MUTE-SWITCH/ENABLEK11
 DAT-SCAJ11 PAUSEK5

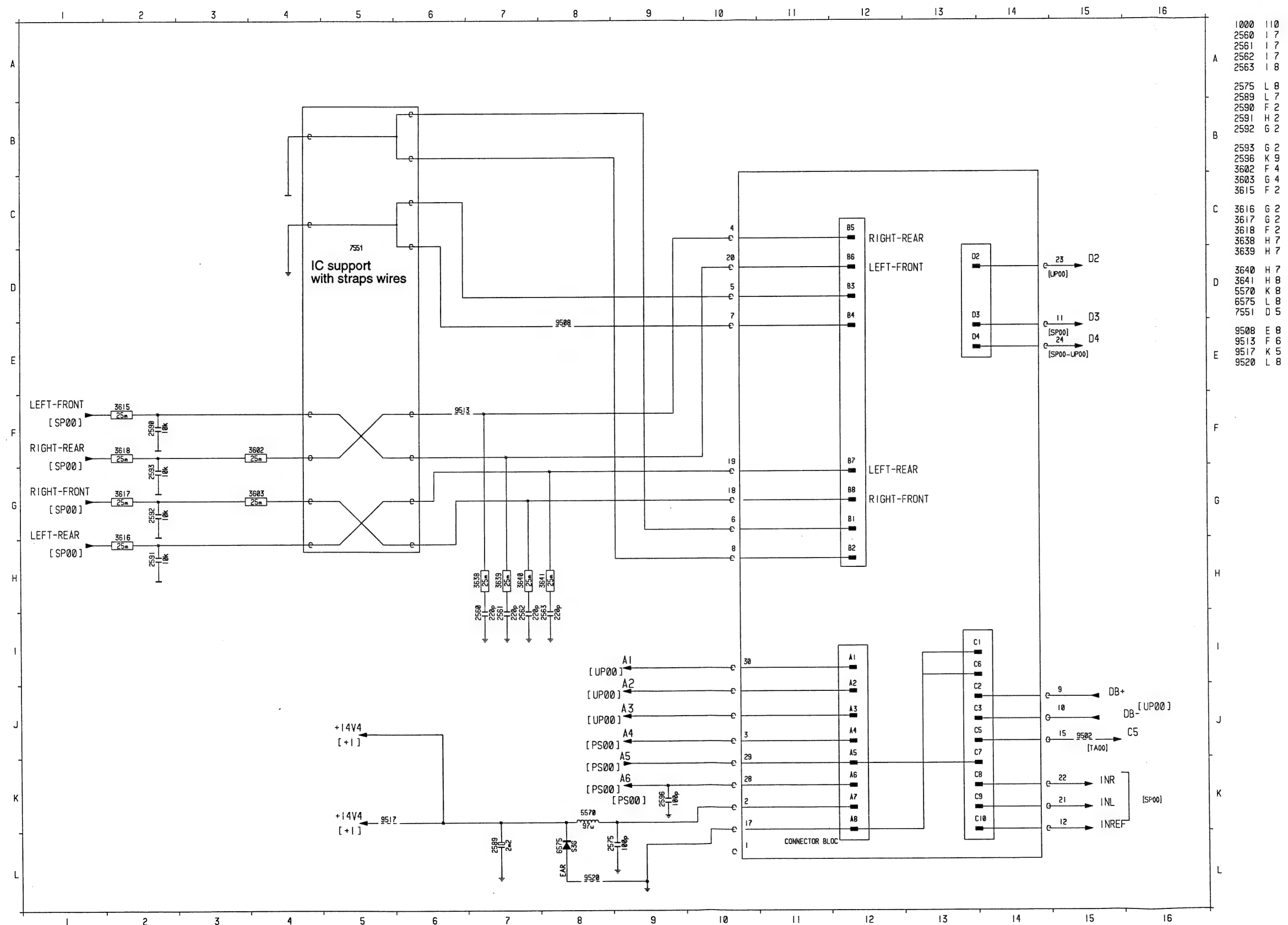


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 2254 J6
 2255 B6
 2259 E3
 2265 B9
 B 2266 B10
 2268 B4
 2269 I4
 2275 J8
 2276 C9
 2280 I9
 C 2281 B8
 2282 C9
 2283 H8
 2284 D8
 2285 I8
 2288 C10
 D 2290 I9
 2291 L3
 2292 L4
 2293 K2
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 E 3252 J5
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 K
 L



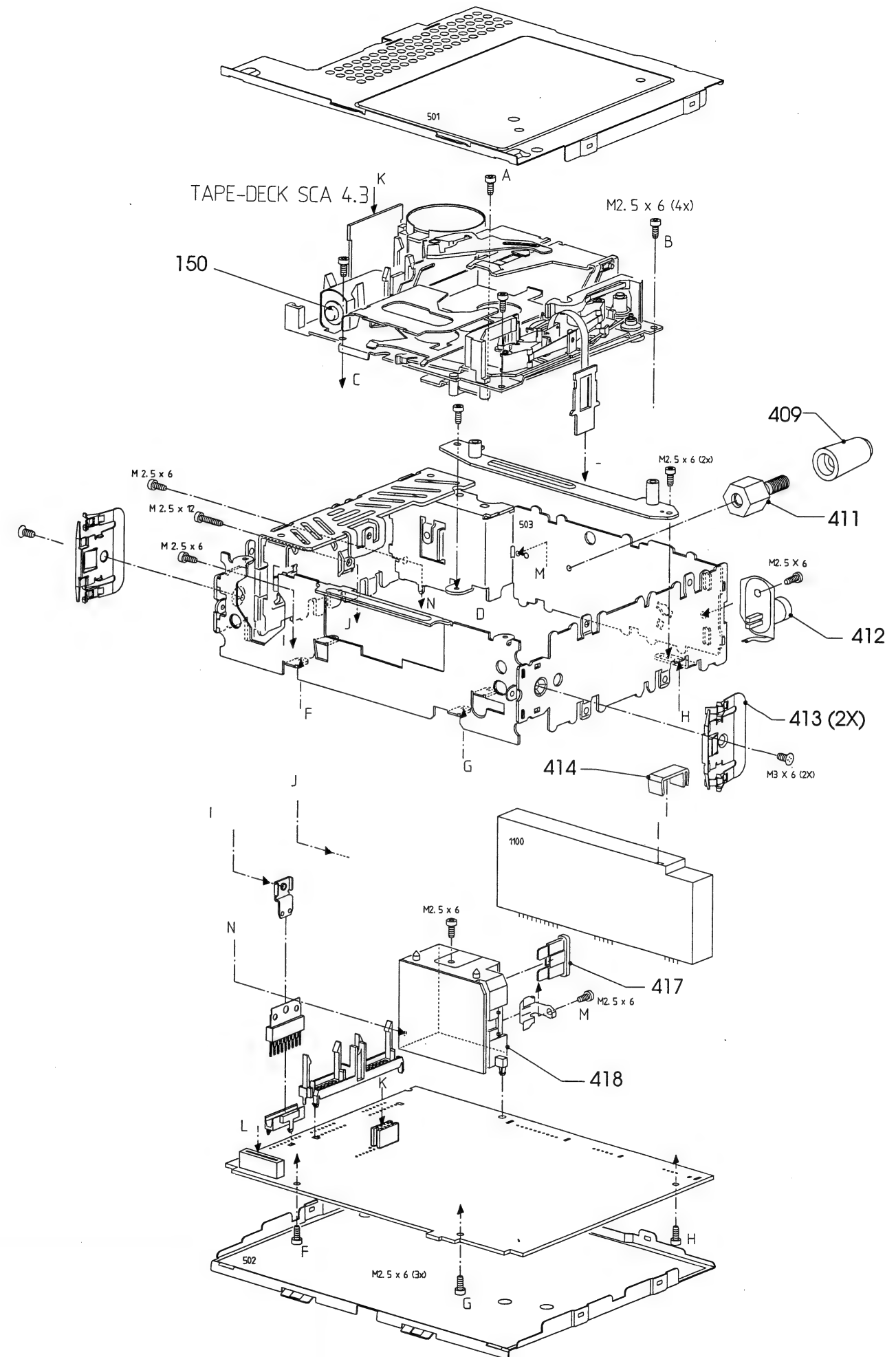
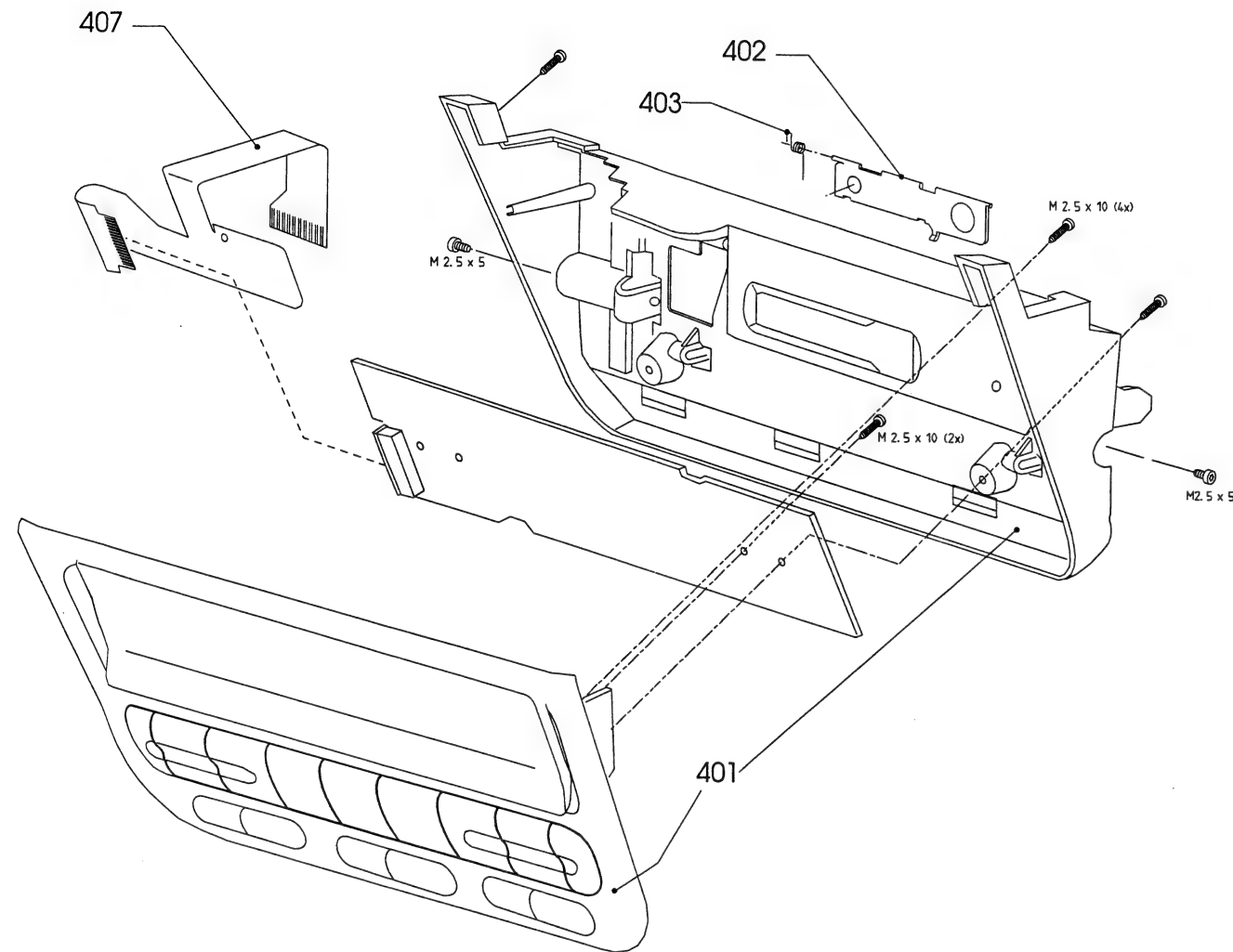
1000	I 10
2553	H 4
2554	E 6
2555	H 5
2556	C 7
2557	C 7
2558	C 8
2559	C 8
2560	I 7
2561	I 7
2562	I 7
2563	I 8
2570	J 6
2575	L 8
2580	I 2
2582	D 5
2583	D 5
2584	A 6
2589	L 7
2590	F 2
2591	H 2
2592	G 2
2593	G 2
2596	K 9
3564	I 2
3565	I 3
3584	L 3
3585	L 3
3586	K 3
3587	K 2
3604	F 4
3605	G 4
3615	F 2
3616	H 2
3617	G 2
3618	F 2
3634	B 7
3635	B 7
3636	B 8
3637	B 8
3638	H 7
3639	H 7
3640	H 7
3641	H 8
5570	K 8
6575	L 8
7550	D 5
7551	H 5
7554	L 2
7555	J 3
9508	A 8
9511	J 6
9513	F 6
9516	K 6
9517	K 6
9519	K 7
9520	L 8

22DC722/65Z POWER AMPLIFIER PART



1000	110
2560	17
2561	17
2562	17
2563	18
2575	L 8
2589	L 7
2590	F 2
2591	H 2
2592	G 2
2593	G 2
2596	K 9
3602	F 4
3603	G 4
3615	F 2
3616	G 2
3617	G 2
3618	F 2
3638	H 7
3639	H 7
3640	H 7
3641	H 8
5570	K 8
6575	L 8
7551	D 5
9508	E 8
9513	F 6
9517	K 5
9520	L 8



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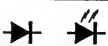

MECHANICAL PARTSLIST

401	4822 459 05115	ORNAMENTAL PLATE (ASSY)
402	4822 443 64411	FLAP CASSETTE PRINTED
403	4822 492 42231	SPRING FLAP
407	4822 466 10683	FOIL FLEX
409	4822 532 12177	SPACER
411	4822 462 72087	SPACER METAL
412	4822 267 31702	AERIAL BUSH



413	4822 492 71523	MOUNTING SPRING
414	4822 404 21276	IC96 HOOK
417	4822 071 21003	FUSE 10A
418	4822 290 61227	CONNECTOR BLOCK
150	4822 691 10605	TAPE DECK SCA4.3/H

					
3419	4822 051 20008	0Ω JUMP. (0805)	3703	4822 117 10833	10K 1% 0,1W
3425	4822 051 20224	220KΩ 5% 0,1W	3704	4822 117 10833	10K 1% 0,1W
3426	4822 051 20224	220KΩ 5% 0,1W	3706	4822 051 20008	0Ω JUMP. (0805)
3432	4822 051 20224	220KΩ 5% 0,1W	3707	4822 051 20008	0Ω JUMP. (0805)
3435	4822 051 20008	0Ω JUMP. (0805)	3709	4822 051 20153	15KΩ 5% 0,1W
3436	4822 051 20683	68KΩ 5% 0,1W	3710	4822 051 20471	470Ω 5% 0,1W
3437	4822 051 20008	0Ω JUMP. (0805)	3711	4822 051 20153	15KΩ 5% 0,1W
3438	4822 051 20683	68KΩ 5% 0,1W	3712	4822 051 20008	0Ω JUMP. (0805)
3505	4822 051 20104	100KΩ 5% 0,1W	3713	4822 117 10834	47K 1% 0,1W
3509	4822 116 52176	10E 5% 0,5W	3714	4822 117 10834	47K 1% 0,1W
3564	4822 051 20223	22KΩ 5% 0,1W	3717	4822 117 10833	10K 1% 0,1W
3584	4822 051 20392	3K90 5% 0,1W	3718	4822 051 20472	4K70 5% 0,1W
3585	4822 116 40254	330R	3720	4822 051 20102	1KΩ 5% 0,1W
3586	4822 051 20223	22KΩ 5% 0,1W	3721	4822 051 20153	15KΩ 5% 0,1W
3587	4822 051 20223	22KΩ 5% 0,1W	3725	4822 051 20104	100KΩ 5% 0,1W
3592	4822 051 20008	0Ω JUMP. (0805)	3726	4822 051 20101	100Ω 5% 0,1W
3593	4822 051 20008	0Ω JUMP. (0805)	3727	4822 051 20101	100Ω 5% 0,1W
3599	4822 051 20008	0Ω JUMP. (0805)	3728	4822 117 10833	10K 1% 0,1W
3601	4822 051 20008	0Ω JUMP. (0805)	3729	4822 117 10833	10K 1% 0,1W
3602	4822 051 20008	0Ω JUMP. (0805)	3730	4822 051 20153	15KΩ 5% 0,1W
3603	4822 051 20008	0Ω JUMP. (0805)	3731	4822 117 10834	47K 1% 0,1W
3604	4822 051 20008	0Ω JUMP. (0805)	3732	4822 117 10833	10K 1% 0,1W
3605	4822 051 20008	0Ω JUMP. (0805)	3805	4822 117 10834	47K 1% 0,1W
3608	4822 051 20008	0Ω JUMP. (0805)	3806	4822 051 20102	1KΩ 5% 0,1W
3609	4822 051 20008	0Ω JUMP. (0805)	3807	4822 117 10833	10K 1% 0,1W
3610	4822 116 40221	8R2 20%	3808	4822 117 10833	10K 1% 0,1W
3613	4822 051 20333	33KΩ 5% 0,1W	3809	4822 050 21002	1KΩ 1% 0,6W
3614	4822 051 20104	100KΩ 5% 0,1W	3810	4822 117 10833	10K 1% 0,1W
3615	4822 050 21002	1KΩ 1% 0,6W	3811	4822 117 10834	47K 1% 0,1W
3616	4822 050 21002	1KΩ 1% 0,6W	3812	4822 051 20153	15KΩ 5% 0,1W
3617	4822 050 21002	1KΩ 1% 0,6W	3813	4822 117 10834	47K 1% 0,1W
3618	4822 050 21002	1KΩ 1% 0,6W	3820	4822 050 21002	1KΩ 1% 0,6W
3619	4822 117 11449	2K2 1% 0,1W	3821	4822 050 21002	1KΩ 1% 0,6W
3620	4822 116 40221	8R2 20%	3822	4822 051 20224	220KΩ 5% 0,1W
3621	4822 051 20101	100Ω 5% 0,1W	3823	4822 051 20104	100KΩ 5% 0,1W
3622	4822 051 20104	100KΩ 5% 0,1W	3824	4822 117 10833	10K 1% 0,1W
3623	4822 051 20104	100KΩ 5% 0,1W	3825	4822 117 10833	10K 1% 0,1W
3624	4822 051 20331	330Ω 5% 0,1W	3826	4822 051 20223	22KΩ 5% 0,1W
3625	4822 051 20331	330Ω 5% 0,1W	3827	4822 051 20333	33KΩ 5% 0,1W
3627	4822 051 20102	1KΩ 5% 0,1W	3828	4822 117 10833	10K 1% 0,1W
3628	4822 051 20008	0Ω JUMP. (0805)	3829	4822 051 20153	15KΩ 5% 0,1W
3629	4822 051 20008	0Ω JUMP. (0805)	3833	4822 117 10833	10K 1% 0,1W
3634	4822 051 20109	10Ω 5% 0,1W	3835	4822 051 20104	100KΩ 5% 0,1W
3635	4822 051 20109	10Ω 5% 0,1W	3836	4822 051 20474	470KΩ 5% 0,1W
3636	4822 051 20109	10Ω 5% 0,1W	3837	4822 117 10833	10K 1% 0,1W
3637	4822 051 20109	10Ω 5% 0,1W	3838	4822 116 40267	3R3 25% 20V
3638	4822 051 20008	0Ω JUMP. (0805)	3839	4822 051 20104	100KΩ 5% 0,1W
3638	4822 051 20109	10Ω 5% 0,1W	3840	4822 116 83872	220R 5% 0,5W
3639	4822 051 20008	0Ω JUMP. (0805)	3841	4822 051 20474	470KΩ 5% 0,1W
3639	4822 051 20109	10Ω 5% 0,1W	3842	4822 117 10833	10K 1% 0,1W
3640	4822 051 20008	0Ω JUMP. (0805)	3843	4822 051 20102	1KΩ 5% 0,1W
3640	4822 051 20109	10Ω 5% 0,1W	3844	4822 117 10834	47K 1% 0,1W
3641	4822 051 20008	0Ω JUMP. (0805)	3845	4822 051 20102	1KΩ 5% 0,1W
3641	4822 051 20109	10Ω 5% 0,1W	3846	4822 051 20102	1KΩ 5% 0,1W
3643	4822 117 10833	10K 1% 0,1W	3847	4822 051 20471	470Ω 5% 0,1W
3644	4822 117 10833	10K 1% 0,1W	3848	4822 051 20471	470Ω 5% 0,1W
3645	4822 117 10833	10K 1% 0,1W	3849	4822 117 10833	10K 1% 0,1W
3646	4822 117 10833	10K 1% 0,1W	3852	4822 051 20102	1KΩ 5% 0,1W
3700	4822 117 10833	10K 1% 0,1W	3854	4822 117 10834	47K 1% 0,1W
3701	4822 051 20101	100Ω 5% 0,1W	3855	4822 051 20105	1M00 5% 0,1W

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3857	4822 051 20104	100KΩ 5% 0,1W	6610	4822 130 32904	BZV85-C5V6
3858	4822 117 10833	10K 1% 0,1W	6611	4822 130 32904	BZV85-C5V6
3861	4822 051 20008	0Ω JUMP. (0805)	6617	4822 130 83757	BAS216
3862	4822 116 83874	220K 5% 0,5W	6785	5322 130 30684	1N4002RL
3863	4822 051 20104	100KΩ 5% 0,1W	6812	4822 130 83757	BAS216
3864	4822 051 20478	4R70 5% 0,1W	6816	4822 130 83757	BAS216
3870	4822 051 20008	0Ω JUMP. (0805)	6817	5322 130 34337	BAV99
3871	4822 051 20104	100KΩ 5% 0,1W	6818	5322 130 34331	BAV70
3901	4822 051 20122	1K20 5% 0,1W	6819	4822 130 83757	BAS216
3902	4822 051 20122	1K20 5% 0,1W	6820	5322 130 34337	BAV99
3903	4822 051 20122	1K20 5% 0,1W	6822	4822 130 83757	BAS216
3904	4822 051 20122	1K20 5% 0,1W	6901	4822 130 83856	VSL03360
3905	4822 051 20122	1K20 5% 0,1W	6902	4822 130 83856	VSL03360
3906	4822 051 20122	1K20 5% 0,1W	6903	4822 130 83856	VSL03360
3907	4822 051 20122	1K20 5% 0,1W	6904	4822 130 83856	
3908	4822 051 20122	1K20 5% 0,1W	6905	4822 130 83856	VSL03360
3909	4822 051 20122	1K20 5% 0,1W	6906	4822 130 83856	VSL03360
3910	4822 051 20122	1K20 5% 0,1W	6907	4822 130 83856	VSL03360
3911	4822 051 20122	1K20 5% 0,1W	6908	4822 130 83856	VSL03360
3912	4822 051 20122	1K20 5% 0,1W	6909	4822 130 83856	VSL03360
3913	4822 051 20122	1K20 5% 0,1W	6910	4822 130 83856	VSL03360
3914	4822 051 20122	1K20 5% 0,1W	6911	4822 130 83856	VSL03360
3915	4822 051 20122	1K20 5% 0,1W	6912	4822 130 83856	VSL03360
3916	4822 051 20122	1K20 5% 0,1W	6913	4822 130 83856	VSL03360
3917	4822 051 20122	1K20 5% 0,1W	6914	4822 130 83856	VSL03360
3918	4822 051 20122	1K20 5% 0,1W	6915	4822 130 83856	VSL03360
3919	4822 051 20182	1K80 5% 0,1W	6916	4822 130 83856	VSL03360
3920	4822 051 20182	1K80 5% 0,1W	6917	4822 130 83856	VSL03360
3921	4822 051 20182	1K80 5% 0,1W	6918	4822 130 83856	VSL03360
3923	4822 051 20109	10Ω 5% 0,1W	6919	4822 130 83856	VSL03360
3930	4822 051 20472	4K70 5% 0,1W	6920	4822 130 83856	VSL03360
3939	4822 051 20153	15KΩ 5% 0,1W	6925	4822 130 83856	VSL03360
3957	4822 051 20153	15KΩ 5% 0,1W	6971	4822 130 83959	TLHR4900AS
3960	4822 051 20471	470Ω 5% 0,1W			
3961	4822 051 20109	10Ω 5% 0,1W	7251	4822 209 15585	TEA0675T/V2
3969	4822 051 20109	10Ω 5% 0,1W	7257	4822 209 83159	LA2000 (SANYO)
3971	4822 051 20331	330Ω 5% 0,1W	7258	4822 130 60511	BC847B
3972	4822 051 20008	0Ω JUMP. (0805)	7350	4822 209 33985	TDA8579T/N1
3998	4822 117 12955	2K7 1% 0,1W 0805	7354	4822 209 32745	TEA6320/V1
5100	4822 157 71433	120UH 10% LAL05TB121K	7355	4822 209 31981	SAA6579T
5350	4822 242 80259	LN-G38-311 (4,332MHZ)	7356	4822 209 32742	TL074IN
5400	4822 157 71206	BLM21A601SPT	7357	4822 130 60511	BC847B
5570	4822 157 70839	COIL ASSY 160H 5A	7362	5322 130 60508	BC857B
5570	4822 157 70935	160 UH 5A	7550	4822 209 31132	TDA7374V PINN.VERTIC
5600	4822 157 52983	22UH 10%	7550	4822 209 90404	TDA7374B
5601	4822 242 81959	CST11.5MTW	7551	4822 209 31132	TDA7374V PINN.VERTIC
5603	4822 242 81002	CST6,00MGW-TF01	7551	4822 209 90404	TDA7374B
5604	4822 157 60122	4U7 10 %	7554	4822 130 60511	BC847B
5605	4822 157 60122	4U7 10 %	7555	5322 130 60508	BC857B
5606	4822 157 71206	BLM21A601SPT	7600	4822 209 16037	P83CE558EFB/112
5961	4822 242 81959	CST11.5MTW	7601	4822 900 10724	ST24C16CB6
6352	5322 130 30684	1N4002RL	7602	5322 209 10468	HEF4521BP
6354	5322 130 34337	BAV99	7603	4822 209 32743	MSM6307GS
6355	4822 130 83757	BAS216	7609	4822 130 60511	BC847B
6403	5322 130 34337	BAV99	7800	4822 209 33029	TDA3602/N3
6575	4822 130 10488	S3G	7803	4822 130 40995	BD438
			7805	4822 130 60511	BC847B
			7823	4822 130 60511	BC847B
			7824	4822 130 60511	BC847B

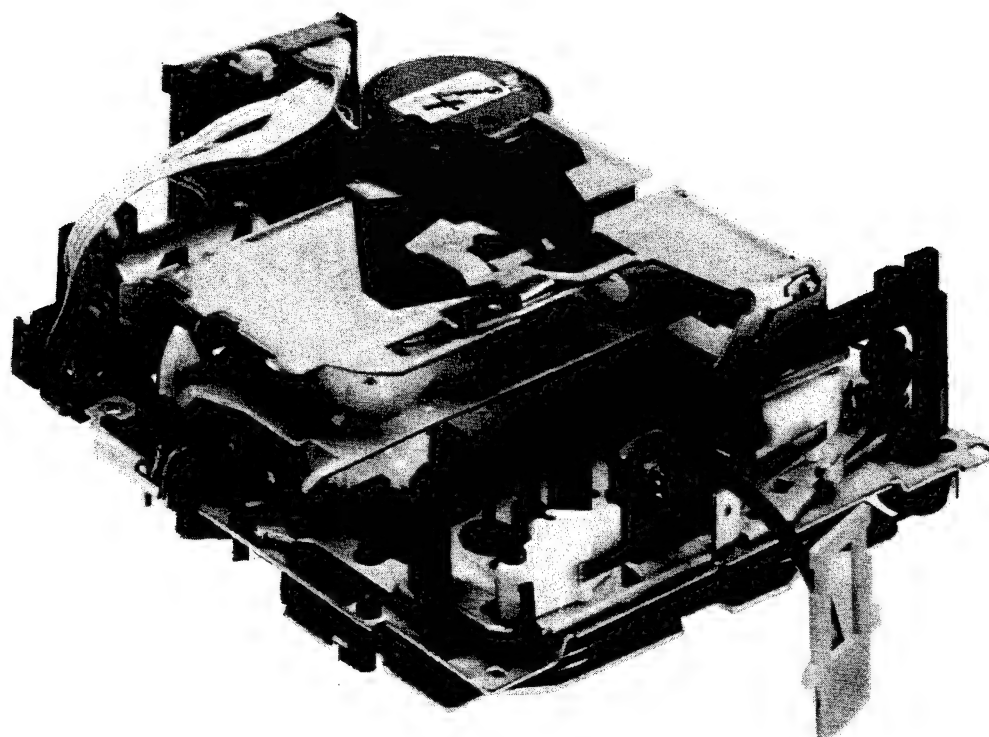
22DC722 / 65X
22DC722 / 65Z

 			
7826	4822 209 12628	HEF4044BT	
7827	5322 130 60508	BC857B	
7828	5322 130 60508	BC857B	
7829	5322 130 60508	BC857B	
7925	4822 130 42615	BC817-40	
7961	4822 209 16916	P83CE528EFB/023	

Service
Service
Service

Service Manual

12 V 



MECHANICAL SPECIFICATION

Operating positions:	Any position from horizontal to 45° standing vertically on the rear side.
Operating temperature:	-20°C to +70°C
Tape speed:	4,76 cm/sec
Wow and flutter:	< 0,5% unweighted < 0,3% weighted
Winding time:	
Test tape: RCA 118 (C60)	< 110 sec
Eject and loading time:	< 2 sec

ELECTRICAL SPECIFICATION

Voltage:	min 10,6 V max 16,0 V
Current - playback:	200 mA
Current - fast wind:	150 mA
Current - eject, standby:	100 µA
Hold in voltage:	8,0 V
Capstan motor:	14,4 V
Servo motor:	2 V DC Play 11,5 V DC Fast, Servo
Playback Crosstalk	
ch. 1 - 2 / 3 - 4	> 36 dB
ch. 2 - 3	> 46 dB

FEATURES

The SCA-4.4 tape deck is usable in several sets. Most of the control functions depend on the hard- and software-configuration of the set in which the deck is installed.

The set µC can control soft eject, emergency eject, standby mode, reverse function, MSS, ME/FE and DOLBY indication.

Some versions of the deck could be equipped with a grooved head and/or a preamplifier circuit.

HANDLING AND DEMOUNTING INSTRUCTIONS

GENERAL

- Protect the tape deck against ESD !
- Plastic catches and snap connections must be released careful with screwdriver or tweezers.
- Cables must be laid in the defined cable guidings after mounting.
- For lubrication see indications in the exploded view.
- To clean tape transport and head only use moist cleaning tapes or piece of cloth, take care that no fluid (alcohol) drops into the bearing.
- For transport lift/carrier assy must be in eject position, do not carry the deck by touching the lift/carrier.
- Use a screwdriver 2,5 mm with insulated shaft for adjusting drift.
- Screw the deck into the set in order: Front right, front left, rear left, rear right.

10. ON/OFF Switch (26)
 - 10.1 Desolder connection cables
 - 10.2 Lever up switch or push with a small pin through the hole at the bottom of the chassis, directly under the switch if servo motor and clutch were removed previously
11. Control pins (16), gear lever (17), play reverse lever (18)
 - 11.1 Remove flywheels acc. 7
 - 11.2 Remove play reverse lever
 - 11.3 Put control pins into mounting position acc. fig.6-D,E
 - 11.4 Take out gear lever
 - 11.5 Pull out control pins
12. Switching lever (20), swivel wheel assembly (7,15,43)
 - 12.1 Release spring (53) from black plastic pin
 - 12.2 Turn switching lever acc. fig.7-A
 - 12.3 Lever up switching lever from axle
 - 12.4 Remove connection wheel acc. 8
 - 12.5 Take out swivel wheel assembly
13. Switching pin (54), transport rod (25), latch (21)
 - 13.1 Remove ON/OFF Switch acc. 10
 - 13.2 Lever up switching pin from axle
 - 13.3 Remove switching lever acc. 12
 - 13.4 Move out transport rod and latch

TOOLS REQUIRED

Test cassette SBC 420	4822 397 30071
Test cassette SBC 419	4822 397 30069
Friction test cassette	4822 395 30054
Puller for clutch (fig.2)	4822 395 60039

ADJUSTMENTS

TORQUE OF REELS (FRICTION)

Adjust potmeter pos. 3409 until friction test cassette shows 9,5 +/- 1,5 mNm in NOR direction (after 2 minutes) and 8,5 +/- 1,5 mNm in REV direction. Backtension must be 0,3 to 0,7 mNm.

If values deviate check lubrication, clutch, take up wheels and backtension springs.

WOW AND FLUTTER, TAPE SPEED

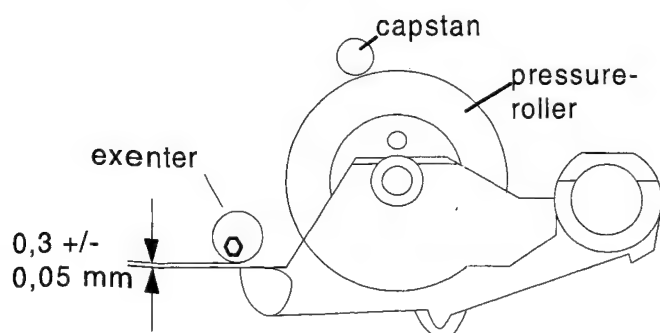
Connect wow and flutter meter to loudspeaker outputs and play the 3150 Hz signal track of test cassette SBC 420. Value should be max. 0,5% (unweighted).

If value deviates check motors, pressure rollers, flywheels, belt, pulley and backtension springs.

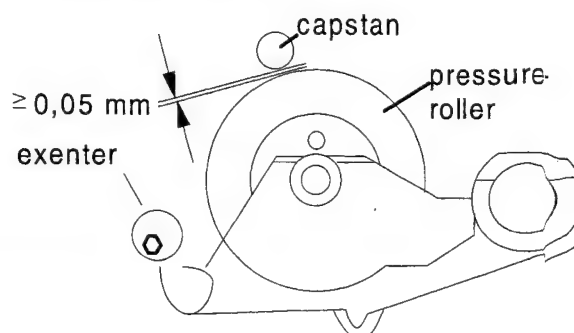
Tape speed can be adjusted with motor potentiometer A (see fig.8). Use a screwdriver with insulated shaft !

PRESSURE ROLLER / CAPSTAN (see figures below)

Adjust clearance play-NOR position between pressure roller and stop head carrier



Adjust clearance FFW position between pressure roller and capstan



EJECTOR 48, HOLDER 49, LIFT 44

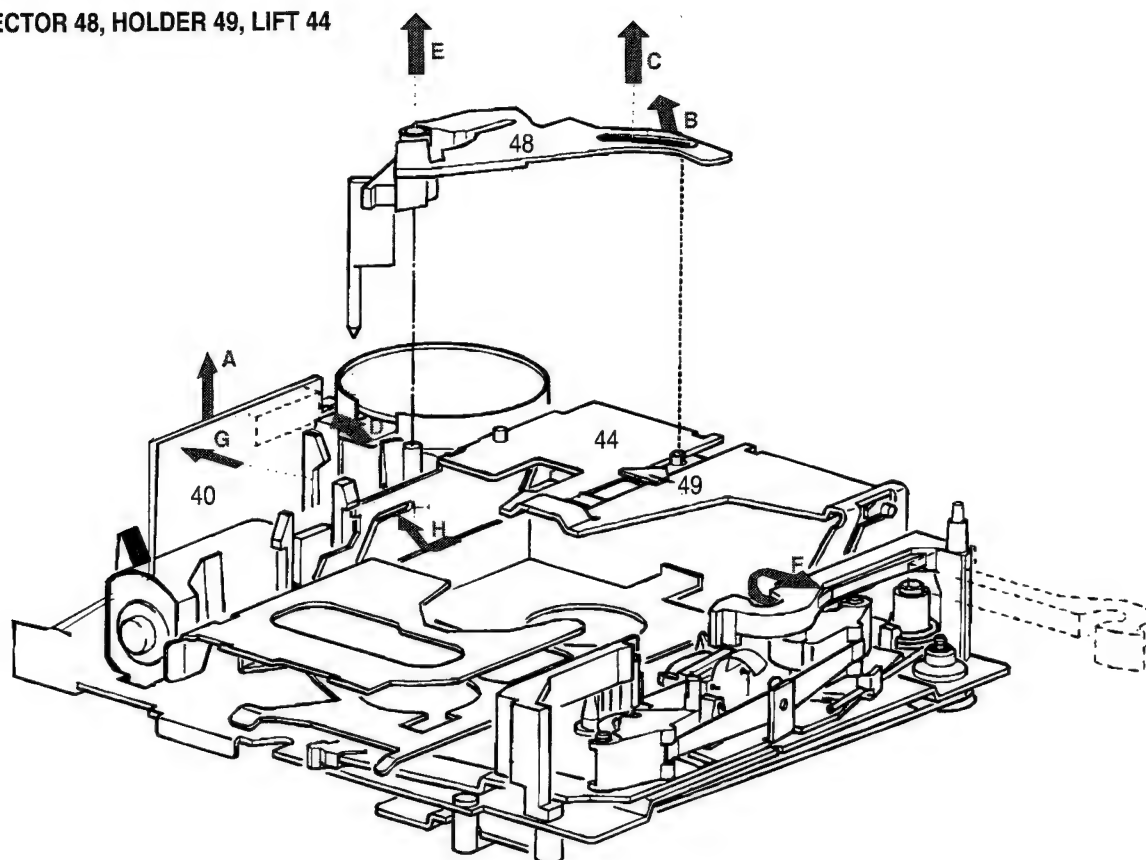


Fig. 1

CLUTCH 59, SWITCH 60, GEAR WHEEL 5, CARRIER 6

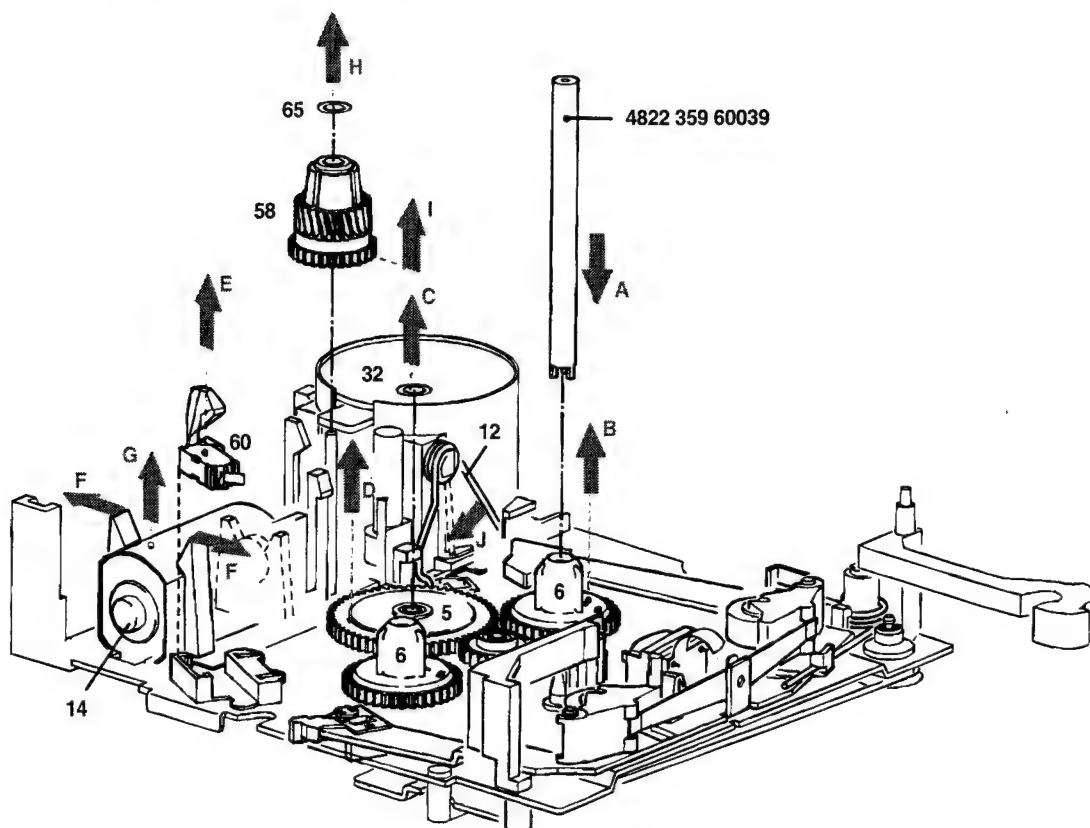


Fig. 2

PRESSURE ROLLER 45, HEAD BRACKET 33, HEAD 34

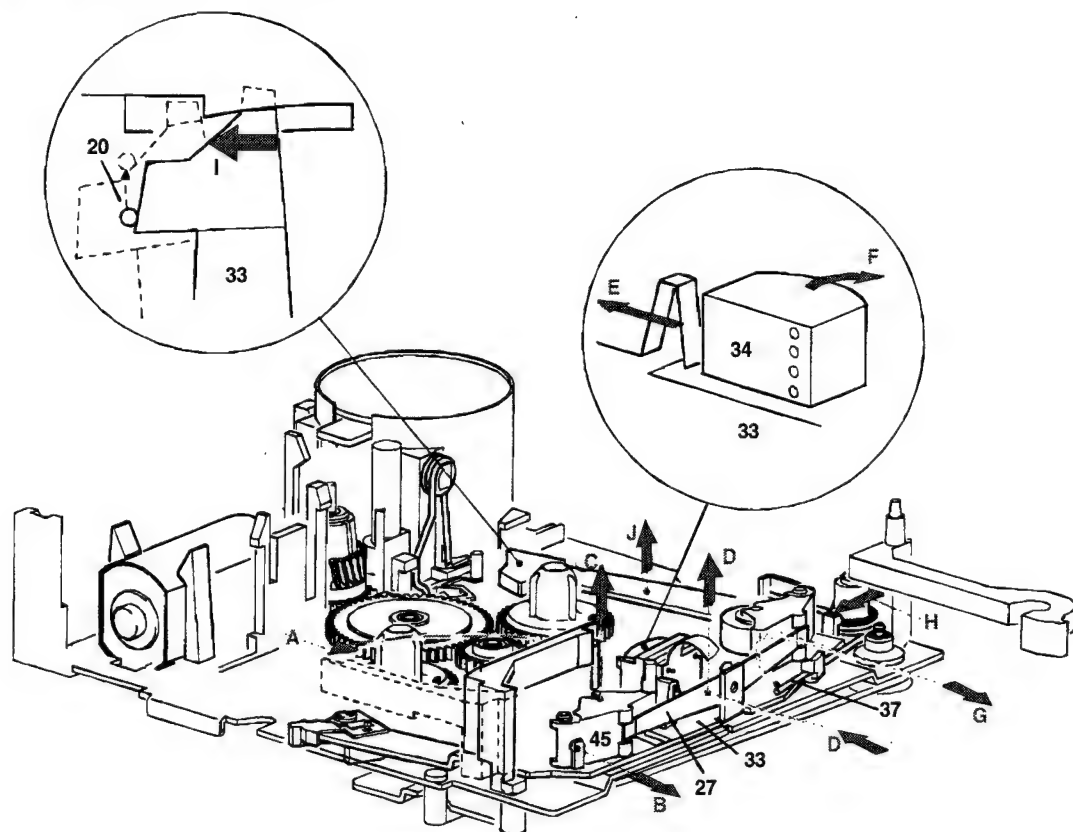


Fig. 3

ANCHOR 3/5, RELAY 1

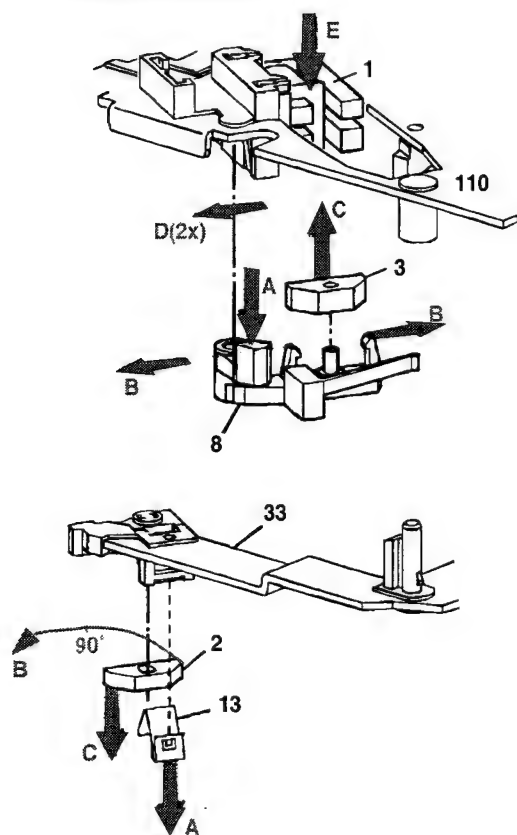


Fig. 4

FLYWHEEL 23, BELT 30

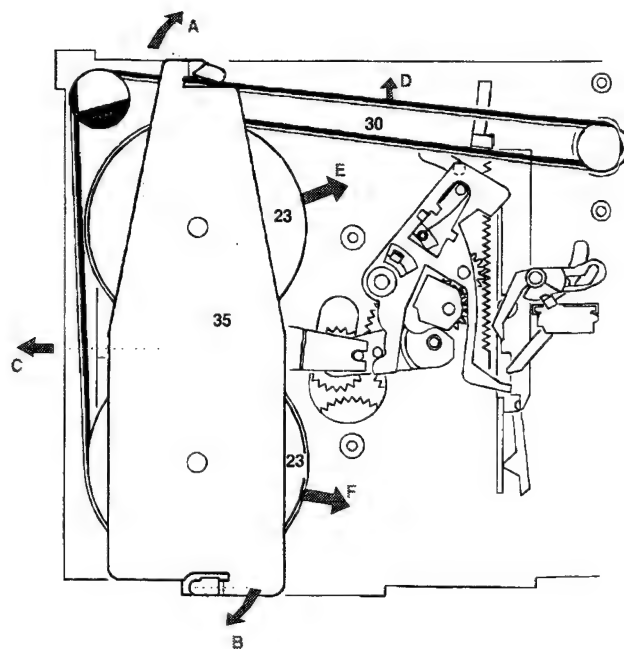


Fig. 5

SEGMENT 16, BRACKET 17, BEARING 70

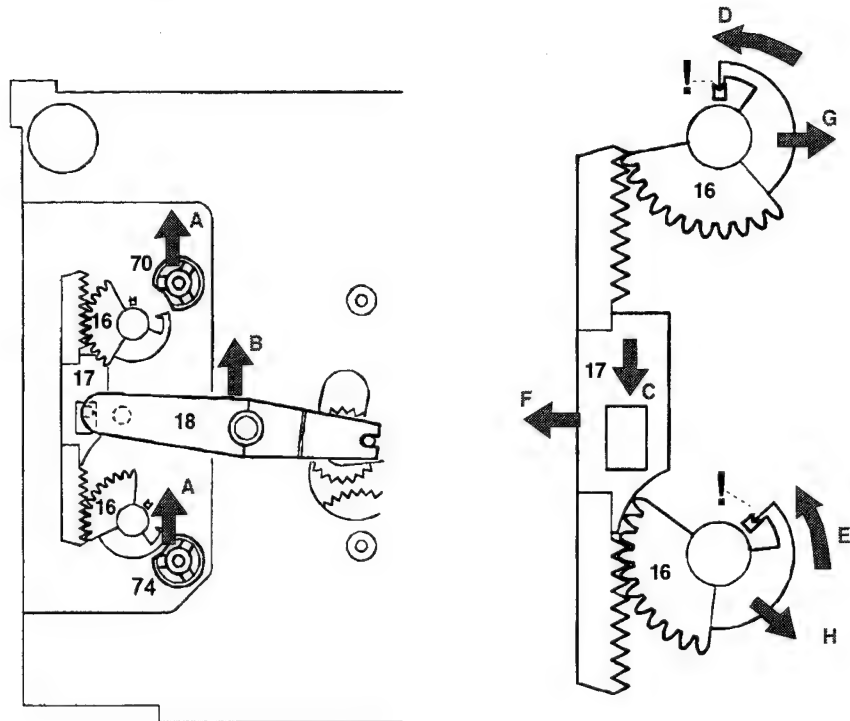


Fig. 6

SWITCH 26, SWIVEL GEAR 7, LEVER 20

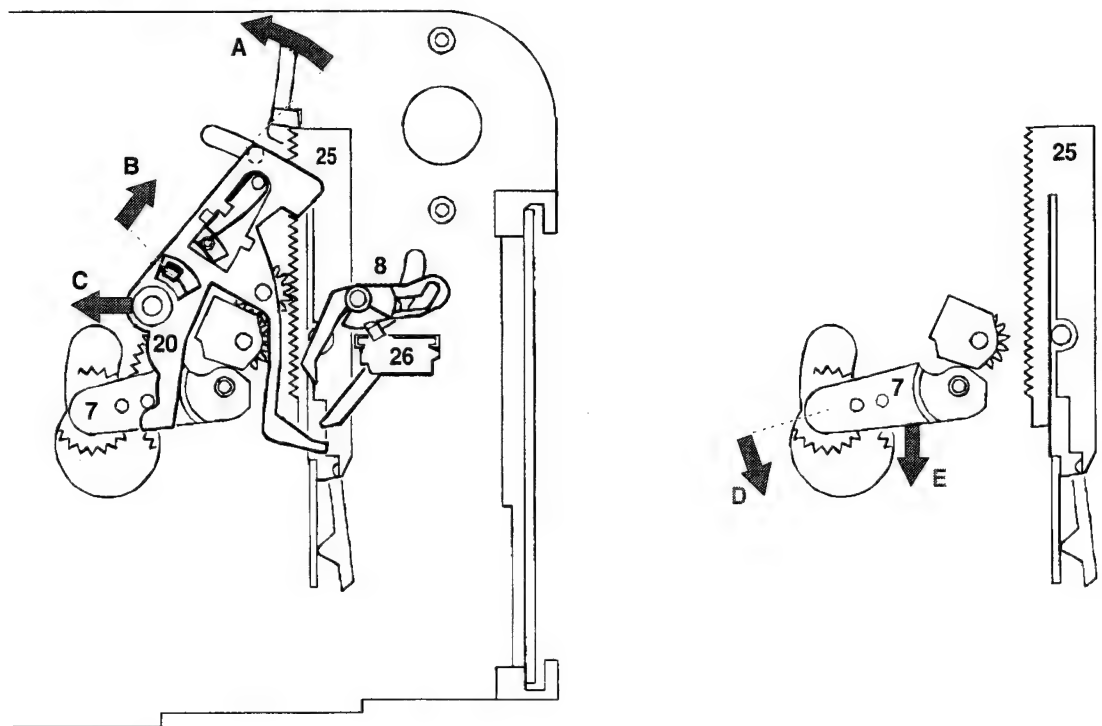
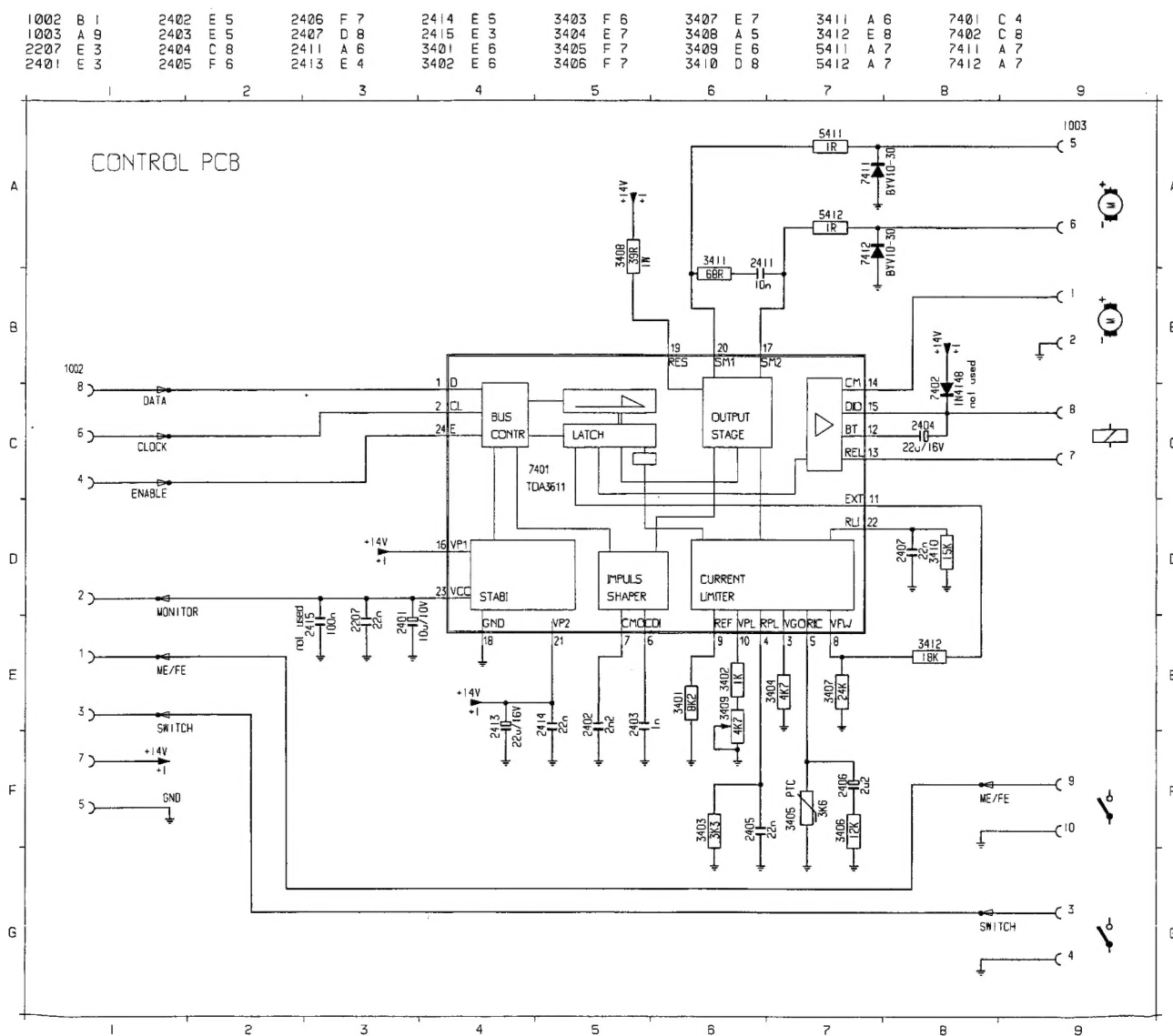
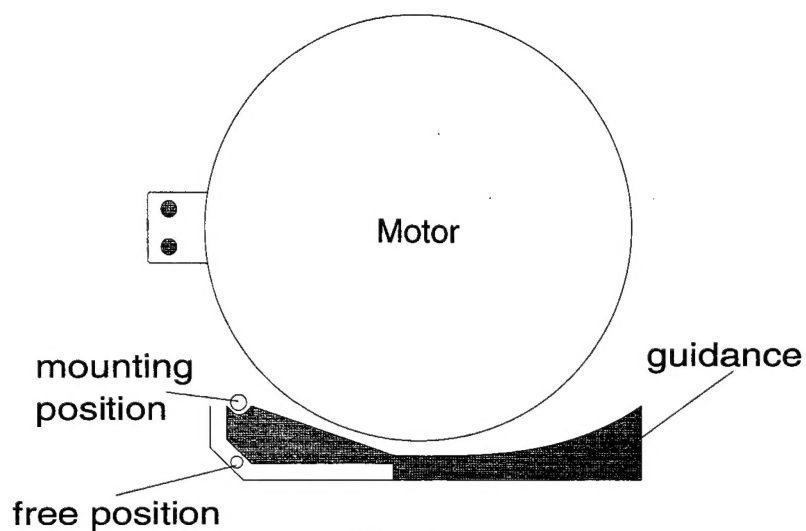


Fig. 7



MEASUREMENTS ON CONTROL PCB

ME/FE: 0,0 V (FE) / 5,0 V (ME/CR)

ON/OFF: 0,0 V (ON) / 5,0 V (OFF)

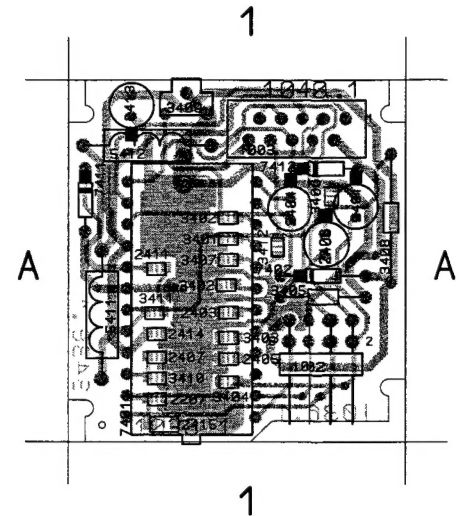
Pos. 7401 TDA 3611

- 1: 5,0 V
- 2: 5,0 V
- 3: 0,7 V / 0,0 V (Sb)
- 4: 0,8 V (PN) / 0,9 V (PR) / 0,3 V (W) / 0,0 V (Sb)
- 5: 0,8 V (PN) / 1,0 V (PR) / 0,4 V (W) / 0,0 V (Sb) / 0,1 V (TA)
- 6: 0,8 V (PN) / 1,0 V (PR) / 0,4 V (W) / 0,0 V (Sb) / 0,1 V (TA)
- 7: 0,7 V (P) / 1,8 V (W) / 0,0 V (Sb) / 0,6 V (TA)
- 8: 3,4 V / 0,0 V (Sb)
- 9: 1,2 V / 0,0 V (Sb)
- 10: 0,5 V / 0,0 V (Sb)
- 11: 3,4 V / 0,0 V (Sb)
- 12: 12,0 V
- 13: 0,5 V / 12,0 V (Sb)
- 14: 0,0 V / 11,5 V (P)
- 15: 11,5 V / 12,0 V (Sb)
- 16: 12,0 V
- 17: 0,1 V (PN) / 2,4 V (PR) / 0,0 V (WN) / 12,0 V (WR) / 0,0 V (Sb)
- 18: GND
- 19: 12,0 V / 8,5 V (P)
- 20: 2,4 V (PN) / 0,1 V (PR) / 12,0 V (WN) / 0,0 V (WR) / 0,0 V (Sb)
- 21: 12,0 V
- 22: 3,6 V (P) / 1,3 V (W) / 0,0 V (Sb)
- 23: 5,0 V
- 24: 5,0 V

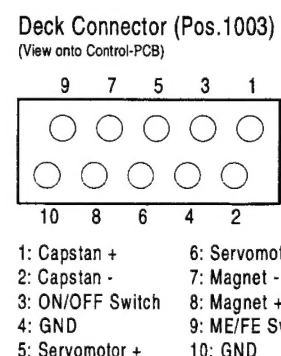
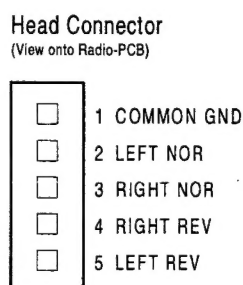
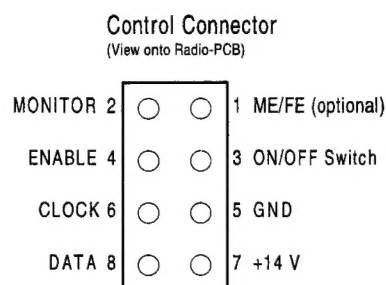
All values measured DC - GND

(P) = Play mode both directions
(W) = Wind mode both directions
(PN) = Play NOR direction
(PR) = Play REV direction
(WN) = Wind NOR direction
(WR) = Wind REV direction
(Sb) = Standby
(TA) = Traffic announcement

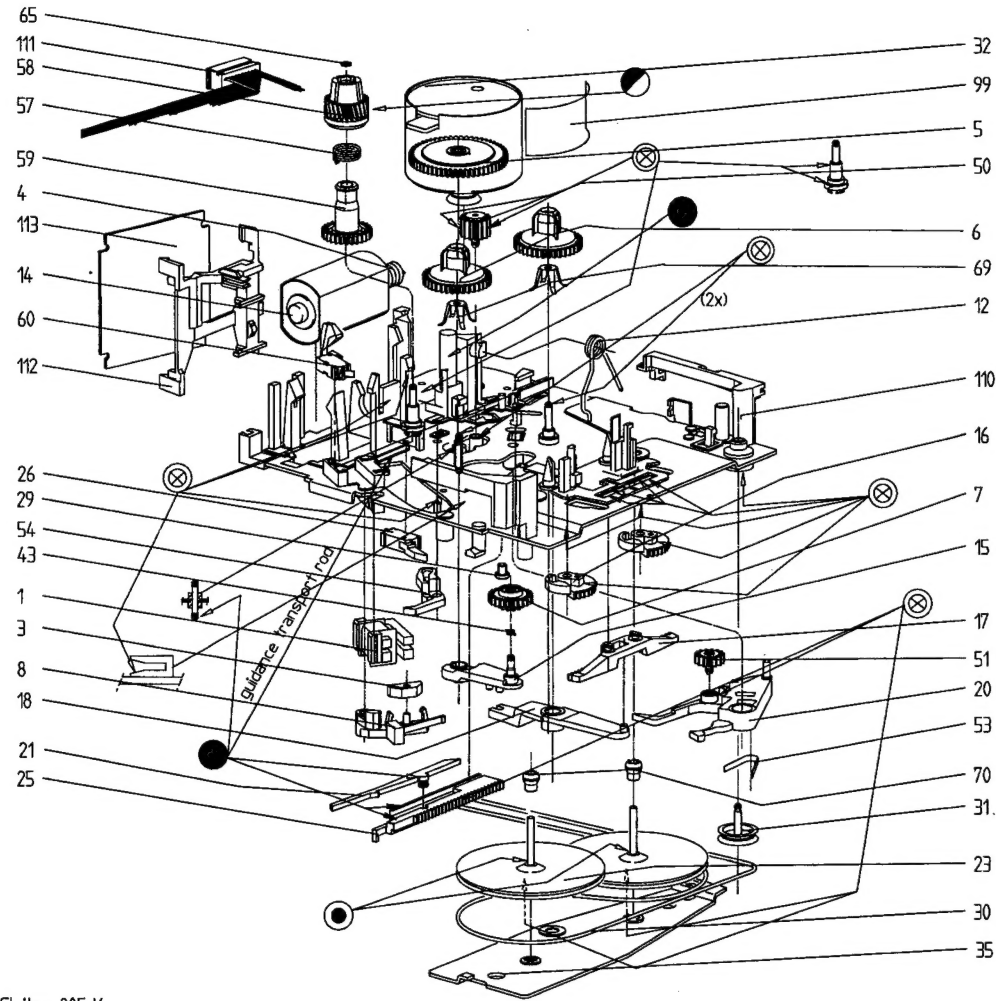
1002 A 1	2413 A 1	3409 A 1
1003 A 1	2414 A 1	3410 A 1
2207 A 1	2415 A 1	3411 A 1
2401 A 1	3401 A 1	3412 A 1
2402 A 1	3402 A 1	5411 A 1
2403 A 1	3403 A 1	5412 A 1
2404 A 1	3404 A 1	7401 A 1
2405 A 1	3405 A 1	7402 A 1
2406 A 1	3406 A 1	7411 A 1
2407 A 1	3407 A 1	7412 A 1
2411 A 1	3408 A 1	



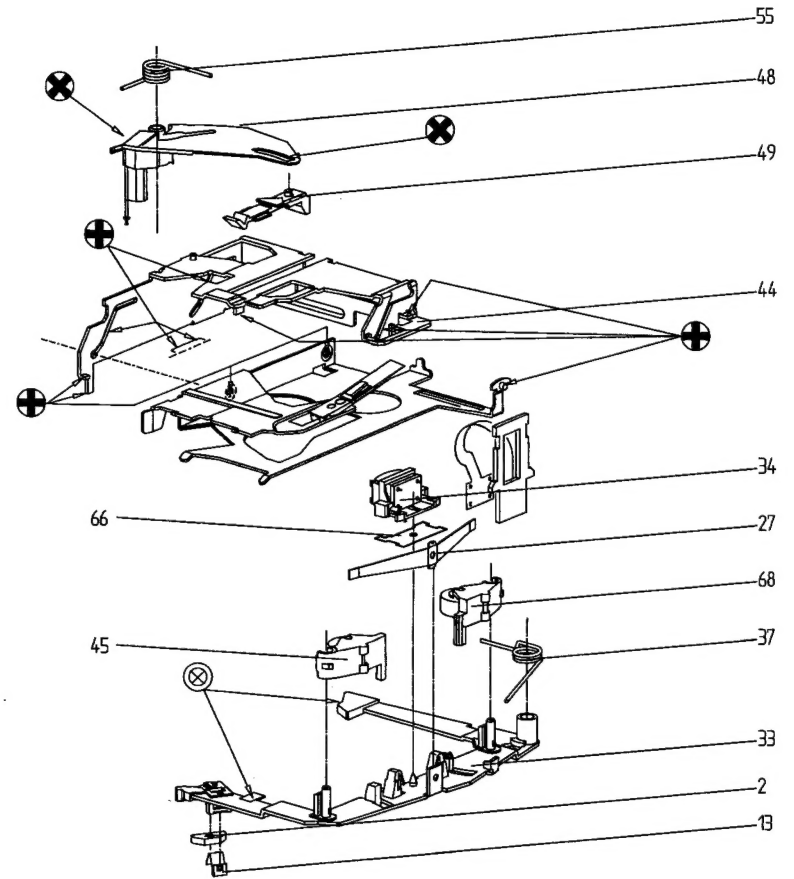
CONNECTORS



Front of Radio ↓



- ⊕ Gleitmo 805 K
- ⊙ Mobil SHC 634
- Contact Oel PDP 65
- ⊗ Topas L30
- ⊗ Gleitmo 585 K
- SM30 TF



MECHANICAL PARTS

1	4822 281 11051	DOUBLE
2	4822 404 21083	ANCHOR ON SUPPORT 33
3	4822 404 21084	ANCHOR IN HOLDER 8
5	4822 522 32868	WHEEL IDLER
6	4822 528 10776	CARRIER
7	4822 528 70658	ASSY
8	4822 404 21087	FOR ANCHOR 2
1	4822 492 70556	FOR ANCHOR 2
14	4822 361 30297	SERVO ASSY
16	4822 522 32869	NORMAL/REVERSE
17	4822 404 21089	DRIVING 16
20	4822 404 21086	ASSY SERVO GEARWHEEL
23	4822 528 81378	FLYWHEEL
26	4822 277 11215	ON/OFF
27	4822 492 70557	FOR PRES. ROLLER 45
29	4822 502 12548	FIX MOTOR 32
30	4822 358 31053	BELT, DRIVING
31	4822 528 81144	DIVERTING BELT
32	4822 361 30294	CAPSTAN
33	4822 404 21088	FOR HEAD, PRES. ROLLER
34	4822 249 30157	WITH FLEXPRINT
44	4822 466 82631	FOR CASSETTE
45	4822 528 81377	REVERSE
48	4822 404 21091	EJECT
49	4822 404 21092	HOLDING CASSETTE
50	4822 522 32871	COUPLING
59	4822 522 10435	ASSY
60	4822 277 11216	ME/CR
65	4822 532 52348	FOR CARRIER CLUTCH
68	4822 528 81449	NORMAL
69	4822 492 70926	UNDER CARRIER
70	4822 520 30539	FOR FLYWHEEL
111	4822 321 61954	CABLE, CONNECT
112	4822 256 92048	FOR PCB
113	4822 214 52077	PCB KOMPL.

ELECTRICAL PARTS

2207	5322 122 32654	22NF10%X7R	63V
2401	4822 124 22748	10UF	10V
2402	4822 122 33127	2,2NF10%X7R	63V
2403	4822 122 33178	1NF 20% X7R	50V
2404	4822 124 23279	22UF20%	16V
2405	5322 122 32654	22NF10%X7R	63V
2406	4822 124 41013	2,2UF	25V
2407	5322 122 32654	22NF10%X7R	63V
2411	4822 122 33177	10NF 20% X7R	50V
2413	4822 124 23279	22UF20%	16V
2414	5322 122 32654	22NF10%X7R	63V
3401	4822 051 20822	8K20	5% 0,1W
3402	4822 051 20102	1K00	5% 0,1W
3403	4822 051 20332	3K30	5% 0,1W
3404	4822 051 20472	4K70	5% 0,1W
3405	4822 116 40241	3K6 PTC	
3406	4822 051 20123	12K00	5% 0,1W
3407	4822 051 20243	24K00	5% 0,1W
3408	4822 053 10399	39R00	5% 1W
3409	5322 101 11014	5K POTMETER	
3410	4822 051 20153	15K00	5% 0,1W
3411	4822 051 20689	68R00	5% 0,1W
3412	4822 051 20183	18K00	5% 0,1W
5411	4822 050 21008	1R00	1% 0,6W
5412	4822 050 21008	1R00	1% 0,6W
7401	4822 209 32207	TDA3611	
7411	4822 130 32911	BYV10-30	
7412	4822 130 32911	BYV10-30	
AIDS AND TOOLS			
100	4822 390 10107	ISOFLEX PDP65	
101	4822 390 20128	TOPAS L30	
103	4822 390 10123	MOBIL OIL SHC 634	
104	4822 390 20027	GLEITMO 805K	
105	4822 390 20128	L30 TF	
107	4822 390 20139	GLEITMO 585K	